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AMERICAN BUILDER

WORLD'S GREATEST
BUILDING PAPER

Homes for . . .

\$6700



\$7300

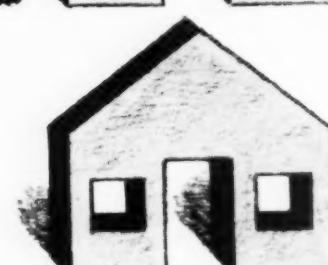
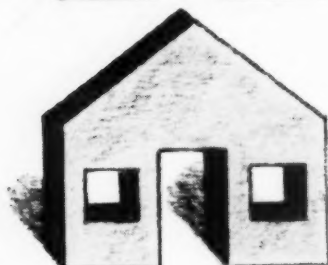
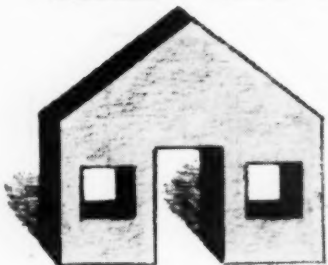
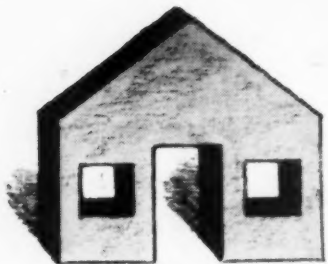



\$9250



Building ECONOMY HOUSES for the mass market . . .

**HOW
TO
MAKE
SUCCESS
A
HABIT**



 On house after house... make these advantages of Celotex Sheathing work for you... before, during, and *after* your sale:

GREATER INSULATION—Three times the insulation value of wood sheathing.

STRONGER CONSTRUCTION—Greater bracing strength than horizontally applied wood sheathing.

EASY APPLICATION—Big boards... square edges... 4-feet wide, in lengths up to 12 feet... or 2-foot x 8-foot lengths, tongue-and-groove long edges, for horizontal application. Goes up *fast*.

MOISTURE PROTECTION—Factory pre-coating of asphalt on both surfaces and all edges. Patented Ferox* treatment resists termite and dry-rot attack.

WIND-TIGHT WALLS—No open joints.

Ask your local lumber dealer for complete information on Celotex *Insulating Sheathing*...or write direct to

THE CELOTEX CORPORATION, CHICAGO 3, ILLINOIS

* REG. U. S. PAT. OFF.

CELOTEX *The Greatest Name in Insulation*

BUILDING BOARD . . . INSULATING SHEATHING AND LATH . . . CELO-ROK ANCHOR LATH AND PLASTER . . . CEMESTO
CELO-ROK WALLBOARD . . . INTERIOR FINISH PRODUCTS . . . FLEXCELL . . . ASPHALT ROOFING . . . CELOBRIC . . . CELO-SIDING

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Ideal windows for the INDUSTRY-ENGINEERED HOUSE

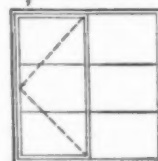
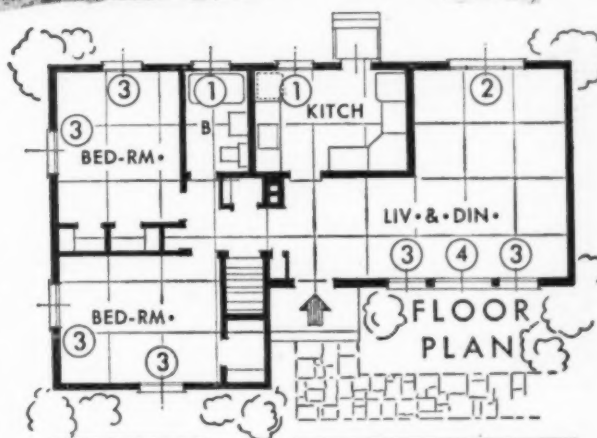
Fenestra Residence Steel Casements are designed for beauty plus utility . . . at low cost made possible by standardization. Thus, they fit the purpose of the Industry-Engineered Houses . . . a lot of value for the money.

Fenestra Casements enable you to provide extra beauty, easy opening, better ventilation and many other benefits with *standard windows*. Fenestra Casement dimensions are co-ordinated with other materials used in Industry-Engineered Houses. You benefit in several important ways:

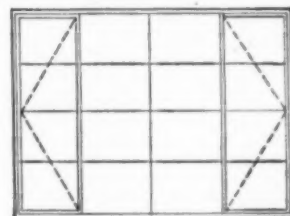
1. Lower first cost resulting from mass production economies.
2. Better, more prompt service . . . standardization enables your dealer to fill your needs from stock.
3. Savings in installation . . . frame and sash are factory-assembled, prime-painted and prepared for attachment of hardware, screens and storm sash.

IN ANY TYPE OF HOUSE you can provide a right window for each need with *standard* Fenestra Casements. This complete line even includes windows for special uses, such as over the sink or buffet . . . all standardized to keep costs down and speed construction . . . all including the many benefits listed below.

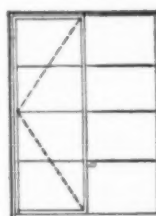
For full information on types and sizes, write to Detroit Steel Products Co., Dept. AB-6, 2260 E. Grand Blvd., Detroit 11, Mich.



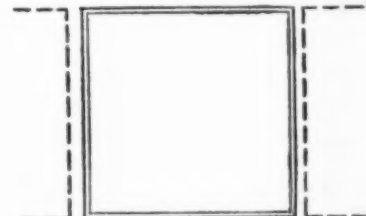
1-TYPE 2313 R-L



2-TYPE 4424



3-TYPE 2414 R-L



4-TYPE 34 MO

ADD SALABILITY WITH THESE ADVANTAGES:

- Distinctive Appearance . . . trim lines
- Low Cost . . . standardized
- More Daylight . . . less frame
- Easy Opening . . . no sticking
- Better Ventilation . . . vents swing out
- More Weather-Tight . . . no warping
- Better Storm Sash . . . fitted inside
- Convenient Screens . . . interchangeable, inside
- Safer Cleaning . . . from inside the room
- Lower Upkeep . . . durability of steel

MADE RIGHT BY AMERICA'S OLDEST AND LARGEST STEEL WINDOW MANUFACTURER

Fenestra
RESIDENCE STEEL CASEMENTS



For *Permanence at Low Cost...*

Install UPSON DUBL-THIK Fibre Tile



No visible face nailing! Amazing Upson Floating Fastener provides for normal structural movement of studs and joists.

5 plies of tightly compressed wood fibers. Laminated to full $\frac{1}{4}$ " thickness for strength and rigidity.

Comes with specially treated smooth, fuzzless surface. Ready for enameling in any color customer likes.

Millions of feet in use! Countless home owners praise the soft enduring beauty of Upson Dubl-Thik Fibre Tile. You can install it easily at good profit, yet finished cost to customer will be lower than tile or tile-like materials.

Not thin, brittle, rough or spongy. Won't crack or loosen. Apply on furring right over old plaster or direct to studs in new construction. Ask your lumber dealer for new detailed Direction Sheets, or send the coupon below—now!



Easily Identified By The Famous BLUE Center

THE UPSON COMPANY, 16 Upson Point, Lockport, New York

Send me your booklet "Gleaming Magic," and directions for applying Upson Dubl-Thik Fibre Tile.

NAME

STREET

CITY

STATE



AMERICAN BUILDER

Founded—1879

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FIRST

in heating and plumbing because they're the best for both important jobs!



The attractive little playroom is a good example of the practical use you can make of a small basement when your heating unit is both good looking and compact. The **MOHAWK** Winter Air Conditioner shown here lends a distinctive, pleasing decorative note to this basement setting, while providing clean, dependable heat to the entire house. Famous for its beauty, sound engineering features and sturdy construction, the Mohawk burns natural, manufactured, mixed or liquefied petroleum gas with maximum efficiency and economy.

■ As the world's largest manufacturer of heating equipment and plumbing fixtures, American-Standard is your most dependable source for both. Not only does American-Standard give you the widest choice of styles, types, models and sizes, but it also is your assurance of the finest quality in *both* heating equipment and plumbing fixtures. That's why more American homes have heating and plumbing by American-Standard than by any other single company. Yes, you'll find that it pays to "make it American-Standard all the way"! For detailed information about the complete range of products, contact your Heating and Plumbing Contractor. **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pa.



You achieve the ultimate in bathroom luxury when you choose the **NEO-ANGLE** bath and harmonizing fixtures from the American-Standard line. The bath, occupying space only about four feet square, is the recessed model of the Neo-Angle with its two integral seats and wider, flatter bottom; the lavatory is the graceful **ROXBURY** with large square bowl, tapered legs, and convenient towel bars. Fittings and other exposed metal finished in gleaming, non-tarnishing Chromard. The water closet is the **MASTER ONE-PIECE**, with quiet, thorough syphon vortex water action.

LOOK FOR THE MARK OF MERIT—It identifies the world's largest line of Heating and Plumbing Products for every use . . . including Boilers, Warm Air Furnaces, Winter Air Conditioners, for all fuels—Water Heaters—Radiators, Convectors, Enclosures—Gas and Oil Burners—Heating Accessories—Bathtubs, Water Closets, Lavatories, Kitchen Sinks, Laundry Trays, Brass Trim—and specialized products for Hospitals, Hotels, Schools, Ships and Railroads.



AMERICAN-Standard
First in Heating and Plumbing



PUBLISHER'S PAGE

T.V.A. — An Example in Socialism

Experience with the Tennessee Valley Authority illustrates, as has been illustrated by so much of the world's experience, that adoption of a little socialism will almost certainly cause a demand for more and more of it and for more and more taxes to finance it. This should be remembered in considering the present socialistic movement for government provision and subsidization of housing for low income groups. If this movement is successful, the same people who are promoting it will soon be advocating subsidized socialized housing for higher income groups—i.e., for every group having enough votes to be an important factor in elections.

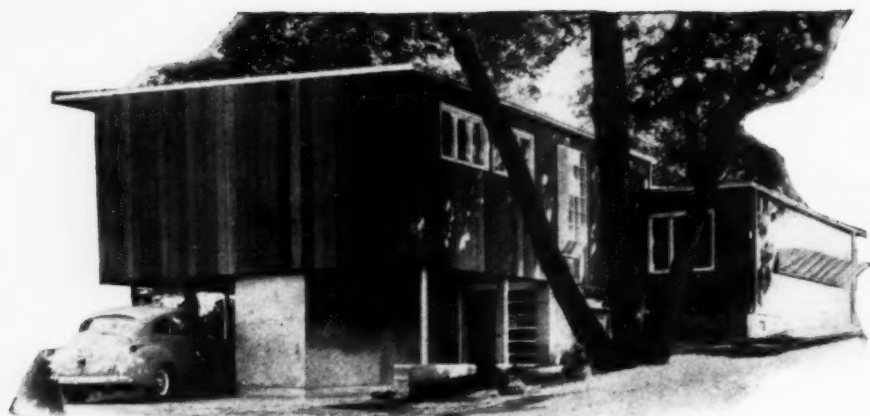
The history of the Tennessee Valley Authority shows how little the assurances of promoters of socialistic policies regarding their real intentions can be trusted. The preamble of the act creating it stated specifically what its purposes purported to be, including improvement of navigation, flood control and reforestation. No mention whatever was made of production of electric power, because of doubt whether the federal government had constitutional authority to engage in competition with private companies producing power. Yet ever since its establishment T.V.A. has devoted itself principally and increasingly to production of power by *hydro-electric* plants. And now, after having spent \$915 million, it has asked Congress for an *initial* appropriation of \$4 million to start a *total* expenditure of \$84 million on *steam facilities* for generating power.

In 1935 David E. Lillienthal, a director of T.V.A., said, "By selling the

power, the federal government will not only receive a cash return, but in the course of years will repay the investment in navigation and flood control works." Instead of the "cash return" and "repayment of investment" promised, T.V.A. is back thirteen years later asking Congress for more big appropriations. Meantime, because of its failure to earn enough to pay interest or taxes, the comparatively small number of people served by it have been subsidized by all the nation's people who pay federal taxes.

Private power companies, like other business concerns, get the capital they invest in expansion directly and indirectly from the net income they have left after paying interest and large taxes. Why, then, cannot T.V.A., which does not pay comparable interest and taxes, make enough earnings to provide for its expansion without asking more appropriations from Congress? The answer is obvious. T.V.A. is government-owned and managed; it is the nation's largest completely socialistic enterprise; and all the experience of the world indicates that democracy in government and successful management of socialized enterprises are entirely incompatible. There have been a few instances of fairly successful management of socialized enterprises by *autocratic* governments. There is no instance in history of equally successful management by any *democratic* government.

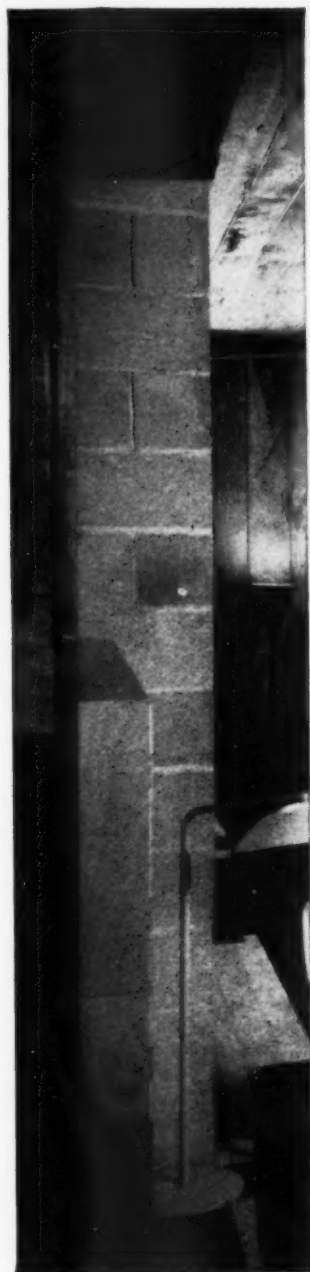
Samuel O. Drumm,



IDEA HOUSE FEATURES

"Climate at your fingertips"

Servel *All-Year* Air Conditioning provides carefree comfort through every season



Co-sponsored by the Walker Art Center in Minneapolis and the Home Institute of the Northwestern National Bank, Idea House II is one of a series built to demonstrate advanced ideas in home planning and equipment. It features one of the most important developments in year-round comfort . . . "climate at your fingertips" provided by Servel *All-Year* Air Conditioning.

In the Idea House, the homeowner selects the climate indoors . . . through every season . . . without ever having to go downstairs. The Servel *All-Year* Air Conditioner is controlled automatically by the Selectrol—a combination thermostat and control device—conveniently placed in the main-floor living area. The homeowner merely dials the temperature he wants and flips a switch for cooling or heating.

Cools in summer, heats in winter

In summer, the Servel unit refreshingly refrigerates the air. It removes sticky humidity and filters out dust,

dirt, and irritating pollen, bringing welcome relief for asthma and hay fever sufferers. Furniture and drapes stay fresh and new-looking longer. There's lots less housework, too.

During the winter months, the same compact Servel unit supplies plenty of clean, even warmth. Just the right amount of moisture is added for comfort. There are no "layers" of hot or cold air. And in between seasons, the Servel *All-Year* Air Conditioner circulates cleaned air throughout the house at the prevailing outdoor temperatures.

Operating costs are low

Yet with all these benefits, the Servel *All-Year* Air Conditioner costs surprisingly little to operate. Maintenance costs are low, too. Like the famous Servel Gas Refrigerator, the Servel *All-Year* Air Conditioner hasn't a single moving part in its refrigeration system to make noise, to wear or need repair.



The Minneapolis Idea House II dramatically illustrates how Servel *All-Year* Air Conditioning can help you bring a "new quality of living" the year-round to any home you may design or build. What's more, when you plan your new houses around the Servel unit, you'll find it possible to make many design innovations and construction economies.

Get the facts on Servel *All-Year* Air Conditioning from your local Gas Company or Servel dealer. Or write to Servel, Inc., 1806 Morton Ave., Evansville 20, Ind.

Servel

All-Year AIR CONDITIONER



"I Like *Supertreated* Pol-mer-ik

because it forms a
tougher, more durable film!"



● That's what EVERETT L. EDWARDS of Jacksonville, Florida, thinks about Supertreated Pol-mer-ik. Like all master painters, he wants a tough, enduring paint film that applies evenly and easily . . . one that will stand up to wear and weather. He finds these qualities in Supertreated Pol-mer-ik.

Supertreating is a special processing and blending that strengthens Pol-mer-ik's molecular structure. It makes for finer application, better leveling and higher gloss—the prime requisites of better painting.

Pol-mer-ik gives you these EXTRA VALUES AT NO EXTRA COST. If you don't know your local Pol-mer-ik dealer, write for his name.

Pol-mer-ik

100% PURE LINSEED OIL

Raw and Boiled Available in Factory-sealed Cans

5-gallon, 1-gallon, quarts and pints

EXTRA VALUE AT NO EXTRA COST

Product of **ARCHER-DANIELS-MIDLAND CO.**

680 Roanoke Building, Minneapolis, Minnesota

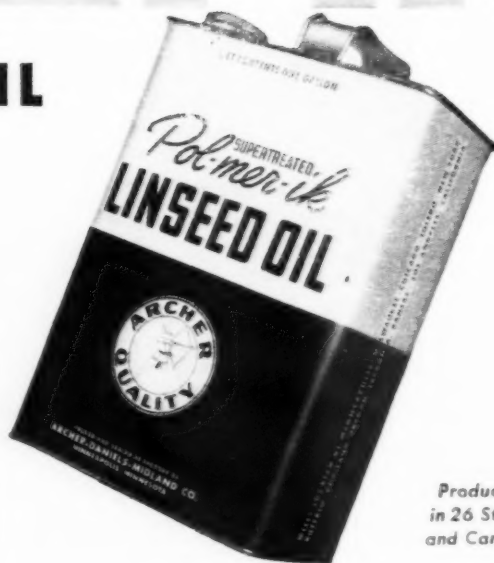
Send additional information on Supertreated Pol-mer-ik Linseed Oil.

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Firm _____

Address _____

City _____ Zone _____ State _____



Production
in 26 States
and Canada

Amazing New Manufacturing Method Provides Contractors IMMEDIATE DELIVERY ON STEELCRAFT STEEL CASEMENTS!

HERE'S HOW I SOLVED MY DELIVERY
PROBLEMS WITH IMMEDIATELY AVAIL-
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- 2 Electropainting ... for More Pro-
tection, Longer Lasting Finish!
- 3 Machined Parts for Perfect Fit,
Easier Installation!
- 4 Prompt Delivery! ... Your Order
Shipped Without Delay!



A Steel Casement, Basement, or Utility Window
for a Variety of Uses!

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A completely new Steelcraft
product ... amazingly light-
er, yet fully as strong as any
lintel on the market! Indicate
on coupon your request for
more complete information!

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Casement Installation!"



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booklet on casement in-
stallation ... for some
handy hints that might
save you a headache or
two!



STEELCRAFT
MANUFACTURING COMPANY
ROSSMOTNE (CINCINNATI), OHIO

FROM dealer to consumer and back again the word is spreading: STEELCRAFT gives those ADDED BENEFITS — of strength, lightness ... ease of installation, operation, and cleaning ... beautiful appearance. These many advantages are possible because of remarkable new production methods that bring streamlined automotive assembly-line procedure into casement manufacturing, result in precision fit of all parts and lasting, eye-appealing protective finish. It's no wonder, then, that contractors everywhere are demanding STEELCRAFT Steel Casements, for advantages of finer engineered casement construction and greater durability ... and prompt delivery. Write today for complete details about sensational STEELCRAFT Casement Windows.

MAIL THIS COUPON TODAY!

STEELCRAFT MANUFACTURING COMPANY
9071 Blue Ash Road, Rossmoyne, Ohio (near Cincinnati)
Please send me information as indicated:

- ☐ Complete details on STEELCRAFT Casement line
- ☐ Complete details on STEELCRAFT Lintels
- ☐ Free booklet on Casement Installation

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Better Homes and Gardens

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APRIL 1948

NEW KIND OF
Tends Itself Without
And Gives You Warmth

No Skinning!
No work, no
mess, no fuss!

Don't let the floor
show below
the new floor
you put in!

The **AMERICAN HOME**

The smart way to buy a house

This couple is buying a home the right way. They're backing it at home under construction while they can still see what will be made good up later on. One of the things they like about this house is the sheathing—Armstrong's Temlok® Sheathing. It makes the walls stronger and provides good insulation, too.

When Temlok sheathing is nailed to the frame, the whole house is made strong and rigid. A house built with Temlok sheathing is more durable, too, because Temlok is an efficient insulator. It saves heat and makes a house warmer in winter and cooler in summer.

Although Temlok gives you a stronger home, and provides extra insulation, it's no more expensive than ordinary sheathing. Frequent, it reduces the cost of heating. It comes in big sheets, so it goes up fast, which means lower labor costs on the job.

No matter what kind of exterior you want—stone, brick, or clapboard—Temlok Sheathing underneath will make your house stronger and more comfortable. Be sure to ask your builder or lumber dealer about Armstrong's Temlok before you build or buy.

SEND FOR FREE BROCHURE "How to Build a More Comfortable New Home" 24 pages, illustrated in color. Just write to Armstrong Cork Company, Building Materials Division, 1000 Vine Street, Lancaster, Pennsylvania.

ARMSTRONG'S TEMLOK

One of the building materials made by the makers of Armstrong's Linoleum

Here is a typical ad from a series that has already begun in The American Home and Better Homes and Gardens. Through these magazines, Armstrong's messages will be carried to almost six million readers every month—that means millions of good prospects are getting better acquainted with Armstrong products.



CUT THE COUPON
AND MAIL IT NOW!



My name is _____
Address _____
City _____ State _____ Zip _____
I am interested in _____
Please send me _____
Name _____
Title _____
Firm _____
City _____ State _____ Zip _____

mes
Gardens



We're telling your customers about the new Temlok

TO bring the quality story of the new Temlok® to more prospective home owners, Armstrong has begun a long-range program of consumer advertising in leading national magazines.

Every month from now on, advertisements like this will appear in *The American Home* and *Better Homes and Gardens* magazines. These magazines are directed almost entirely to people who are looking for ideas about home building, remodeling, and modernizing. They are your best prospective customers.

The new national advertising will carry full-color illustrations showing typical installations of Armstrong's Temlok and Monowall®. And each advertisement will direct them to their local lumber dealers.

Helpful advertising creates customer good will. You can cash in on this growing product acceptance. Ask your Temlok supplier today for samples of Temlok and the other Armstrong's Building Materials. Or write for further information. Armstrong Cork Company, Building Materials Division, 1606 Ross Street, Lancaster, Pennsylvania.



Armstrong's Temlok

The **COMET** *Line*

THE SENIOR

THE JUNIOR

THE CLIPPER

THE SENIOR "8"

THE TIMBER CUTTER

Top Level in *Power Cutting*

In everything there is always a standout. In the radial power saw field it's Comets! Tough, powerful units, they nevertheless are feather-easy to handle. Comets are loaded with advantages born of long-time field testing. They make ALL the cuts with flashing

speed and superb accuracy. And they last...

longer. Owners will tell you Comets are the top level in power cutting. They are prejudiced, of course, but for excellent reasons.

Remember, Comets give "more cuts per dollar." See your Comet dealer or write direct.

CONSOLIDATED MACHINERY & SUPPLY CO., LTD. • 2029-33 Santa Fe Avenue, Los Angeles 21, California



COMETS *cut quicker*

CHRYSLER AIRTEMP

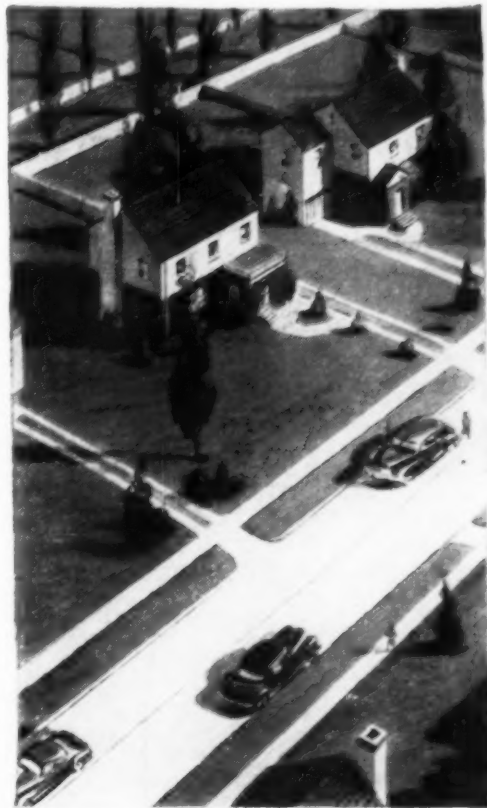
AUTOMATIC HEATING WRITES "SALES SUCCESS" ON NEW HOUSING PROJECTS!

—say leading builders like **Argo Homes Company**
(Elmont, L. I., N. Y.)

●For their universal acceptance among home buyers—for their compactness, dependability, and low-cost operation—for the finest in automatic home heating—Argo Homes Company chose Chrysler Airtemp units for all of their 1,300 new homes in the huge "Argo Village" housing development in Elmont, Long Island (N. Y.).

More and more, builders who plan *far ahead* are specifying Chrysler Airtemp heating units. For this is the name that buyers know and trust. It makes the selling job easier . . . and the year in, year out dependability of these Chrysler-engineered heating units wins buyer good will and enhances the builder's local reputation.

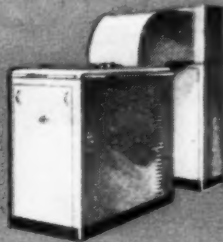
Design these priceless "plus factors" into *your* homes—specify *Chrysler Airtemp!* Your Airtemp dealer will be glad to work with you; why not call him today!



MORE COMFORT FROM ANY TYPE OF FUEL . . . AUTOMATICALLY!



Winter Air Conditioner.
Gas or Oil.



Year-Around Air Conditioner.
Heats and Cools.



Boilers for Steam
and Hot Water.



Automatic Oil
Water Heaters.



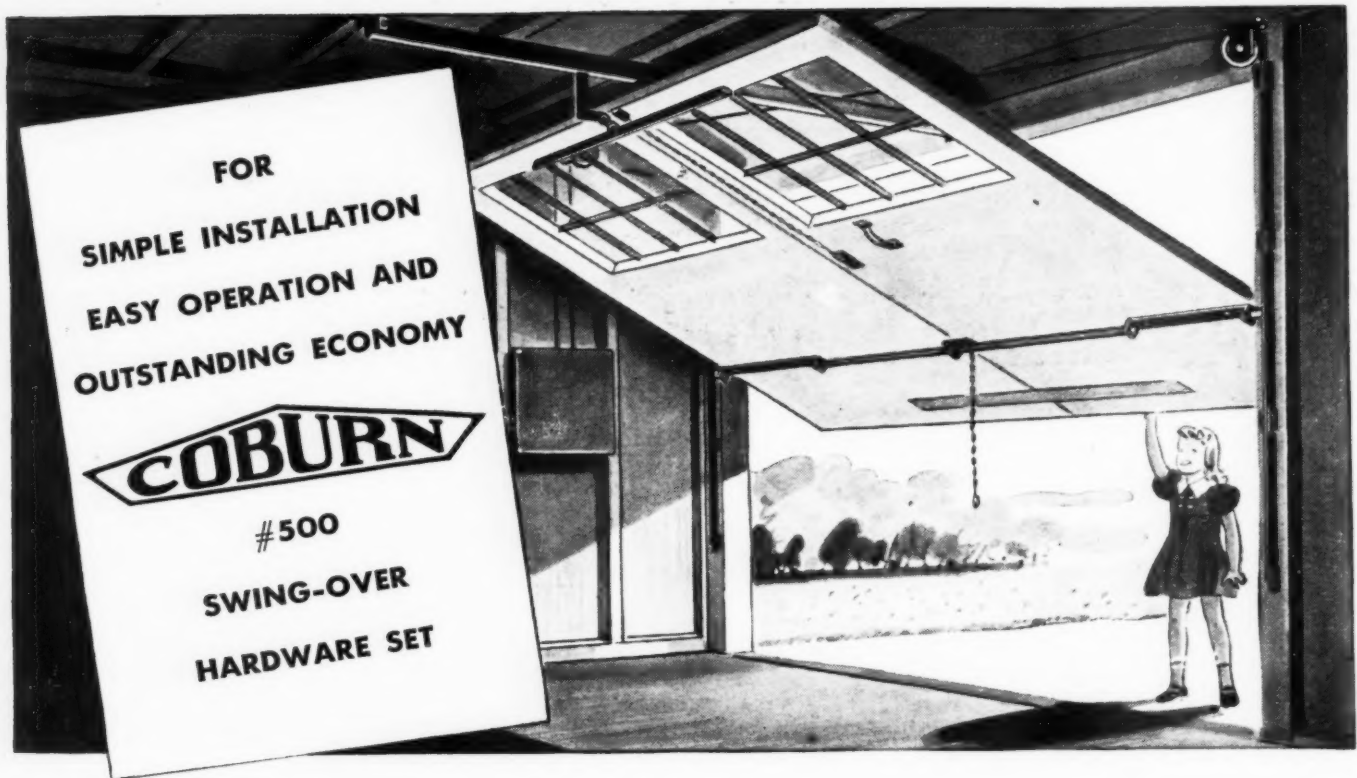
Winter Air Conditioner for
small homes. Gas or oil.

*Nation-Wide
Dealer
Organization* →

There is a Chrysler Airtemp dealer nearby to serve you. Depend on him for prompt delivery, expert installation . . . and for the speedy, efficient maintenance service that holds buyers' good will.

AIRTEMP DIVISION OF CHRYSLER CORPORATION
Dayton 1, Ohio
In Canada: Therm-O-Rite Products, Ltd., Toronto



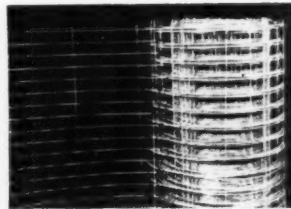


IN GARAGE DOOR remodeling, smooth operating overhead doors are fast replacing the troublesome swinging type . . . and the many advantages of the Coburn #500 Hardware Set have made it a leader in the field.

The Coburn #500 Set is designed to make installation easy, foolproof and adaptable to practically all types of garages. Perfect counterbalance assures effortless operation. Coburn #500 is economical too, for even though it is high in quality, its cost is in the lowest price field.

Write today for catalog containing full information on the Coburn #500 Set and on hardware for numerous types of sliding doors—garage, barn, wardrobe, cabinet.

OTHER WICKWIRE SPENCER PRODUCTS



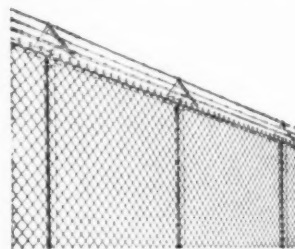
Clinton Welded Wire Fabric

For every type of concrete reinforcement. High, uniform tensile strength. Wide range of styles in gauge and spacing. In sheets or rolls cut to size. Easy to store and install.



"Clinton" Brand Hardware Cloth

Made of cold-drawn carbon steel, heavily galvanized after weaving to give added strength at intersections. In all standard meshes and widths.



Realock Chain Link Fence

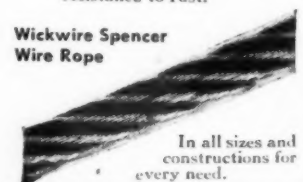
Tamper-proof and weather-resistant. Galvanized before and after weaving. Special designs for industrial plants, institutions and residences. Write for catalog.

"Perfection" Brand Door Springs



Made of selected wire and carefully jappanned. Unequaled for toughness, durability and resistance to rust.

Wickwire Spencer Wire Rope



In all sizes and constructions for every need.



AMERICAN WIRE FABRICS INSECT SCREENING MADE BY

WICKWIRE SPENCER

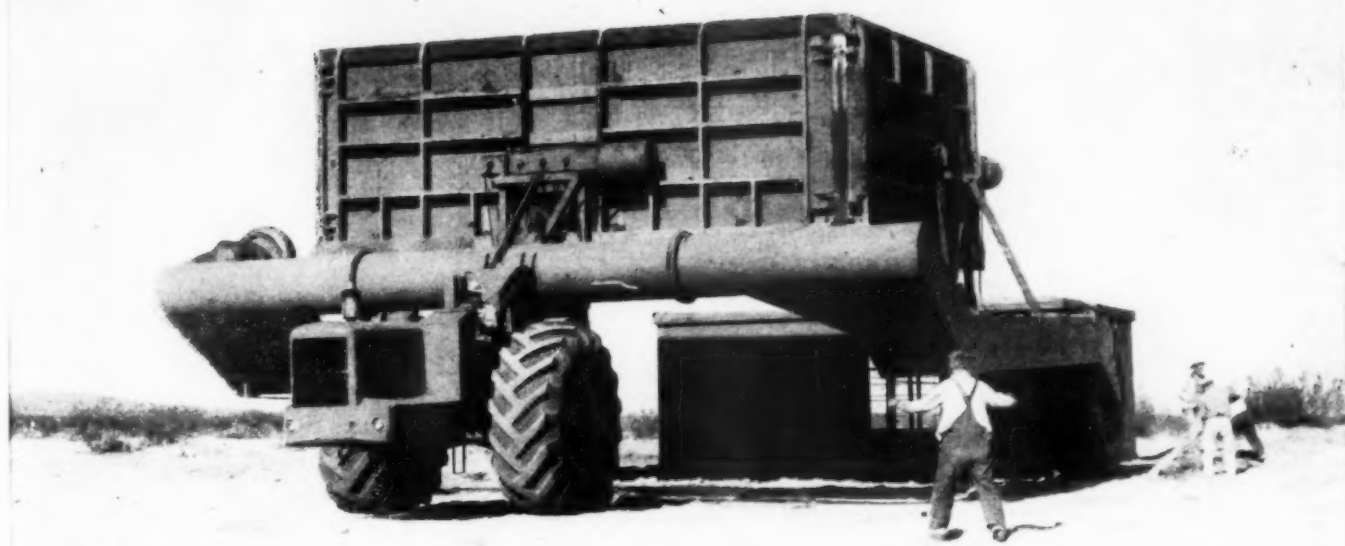
A DIVISION OF THE COLORADO FUEL AND IRON CORPORATION
500 FIFTH AVENUE NEW YORK (18) N. Y.

Steel

Boston • Buffalo • Chicago • Dallas • Denver • Philadelphia • Pacific Coast Subsidiary — The California Wire Cloth Corp., Oakland 6, Cal.

TOURNALAYER

New Job-Proved Home-Building Method



More Profitable 4 Ways

1. Lower Construction Costs

Tournalayer* simplicity has drastically cut total man hours required for home building . . . Skilled labor, usual major cost factor, has been greatly reduced . . . LeTourneau homes are poured in one piece with no joints or seams to point up or caulk . . . Abundant materials are used . . . Insulating concrete eliminates need for furring, lathing and plastering . . . All this means more saving in man hours and materials!

2. Faster Unit Production

Tournalayer mass-home-building method produces distinctive, permanent homes at the rate of one basic unit per day with each set of forms employed . . . Number of forms used is determined by contractor . . . Pre-design of each basic unit is possible and any number or combination of various-sized basic units may be utilized in the planning and construction



ARIZONA — Actual job photo of operations at Yuma, Arizona, where 38 homes 1344 sq. ft. in size are currently being completed

TEXAS — These LeTourneau homes recently completed in South Texas show three variations in architectural treatment.

of a house . . . This means virtually unlimited freedom of design!

3. Better Long Range Investment

LeTourneau homes are built of insulating concrete reinforced with steel-masonry homes that are storm-proof and fire safe, qualifying for a much lower than average insurance rate . . . Extremely durable, LeTourneau homes are termite-proof and cost little to maintain . . . They're cooler in summer — cost less to heat in winter . . . Permanence and individuality of

each house design assures high resale value years from now!

4. Quality Homes

That Can Be Sold for Less

LeTourneau homes are not prefabricated, but are permanent, masonry homes that the builder can design individually, yet mass produce and sell for less than the price of a conventional house . . . These beautiful, well-built homes are now being constructed by firms in North and South America as the low-cost answer to critical need for permanent, livable homes.

TOURNALAYER DIVISION
R.G. LETOURNEAU INC

Manufacturers of
Tournalayers*
Tournacranes*

Longview, Texas

*Trade Mark Reg. U. S. Pat. Off.

Tournamixers
Tournamovers
Tournahaulers

FREE BOOKLET. For more information about the Tournalayer, which is designed for use on large-scale housing projects, write for our new booklet "On-site Monolithic Construction — The Modern Way to Build Better Homes Faster, More Economically."

Stylon

PLASTIC TILE



Stylon

A PRODUCT OF UNITED PLASTIC TILE CO.

The Modern Way TO TILE A WALL

*Beautiful
Enduring ★ Economical*

STYLON . . . beautiful, enduring, economical . . . ushers in a new era in the improvement and beautification of interior walls.

New simplicity and speed comes to installation. New permanence and freedom from maintenance problems comes to the wall (old or new) that is transformed by the beauty of **STYLON** . . . a beauty that is not just skin deep but beneath which lie **STYLON'S** amazing qualities of rugged endurance.

Light in weight, **STYLON** adds almost no construction load. Amazing in textural strength it endures strains of contraction, expansion and settling without damage. It does not check, chip nor crack. It is virtually non-absorbent of moisture . . . it resists alkalis, all common acids, heat, cold, and flame.

The wide versatile range of **STYLON'S** beautiful colors make practical the creation of almost unlimited decorative schemes. Completely fadeless under all normal conditions, the rare beauty of **STYLON** walls never dims or grows old.

In home, office, store or industrial plant, **STYLON** has made possible more beautiful walls, more enduring walls, more economical walls . . . whether installation be new construction, or for improvement and beautification of the old.

Truly . . . **STYLON** is the modern way to tile a wall.

Whether you are a distributor, dealer, contractor or architect your opportunities with **STYLON** are great. In both new construction or in the improvement and beautification of existing structures . . . **STYLON** places in your hands a new-day tile for the construction of enduring, more economical and more beautiful walls. The complete story of **STYLON** . . . the modern way to tile a wall . . . is told in the booklet offered here. A copy is yours without charge. You will profit by sending for it TODAY!

STYLON wall tiles are uniform in size. Each tile is $4\frac{1}{4}$ " sq. Eight tiles cover one sq. ft. Cap tiles are $4\frac{1}{4}$ " x $2\frac{1}{8}$ ".

STYLON is featherweight. One sq. ft. installed weighs but $5\frac{1}{3}$ oz. . . . 10 sq. ft. less than $3\frac{1}{2}$ lbs. . . . an almost negligible load.

STYLON'S flexural strength is amazing . . . ranging from 4000 lbs. to 18,000 lbs. per sq. in.

STYLON will not chip, crack, check, curl or peel. **STYLON** colors are fadeless under all normal interior conditions.

STYLON is resistant to all alkalis and common acids. It resists soiling . . . is easily and quickly cleaned with a damp cloth.

STYLON is heat resistant to temperatures as high as 175° F. It is completely flame resistant.

STYLON sheds water. Any possible absorption is at a minimum. Under continuous submersion for 10 days, absorption was less than 11 oz. per 100 sq. ft.

STYLON wall-tiles require no costly alteration or preparation of a wall. They are speedily, easily installed over any smooth, even, non-porous surface . . . new or old . . . plaster, wood, masonry, sheetrock, plywood or stone.

STYLON FADELESS COLORS cover a range of 15 beautiful shades:

Dark Blue	Dubonnet
Light Blue	Pink
Mottled Green	Mottled Pink
Green	Sandstone
Ivory	White
Mottled Yellow	Black
Pale Yellow	Mottled Blue
	Mottled Gray

Your Opportunity
with

Stylon

*Beautiful
Enduring
Economical*

United Plastic Tile Company
855-A Commonwealth Avenue
Boston 15, Mass.

Please send sample **STYLON** of the colors given below . . . and the booklet on "Your Opportunity With **STYLON**".

Your name

Firm

Street Address

City State

please check nature of your interest
☐ Distributor ☐ Dealer ☐ Contractor ☐ Architect
 colors wanted:

still ^{1ST} choice among designers, builders

...MULTI-FAMILY and MA

since 1937!

... WHEN BRYANT PIONEERED INDIVIDUAL SUITE HEATING IN A GREAT BOSTON APARTMENT BUILDING

● Bryant *Personalized Heating* has been proved with spectacular success the country over, in hundreds of large and small apartment buildings, garden-type apartments, row houses, duplexes . . . and in individual home projects that were planned for heating by a central system.

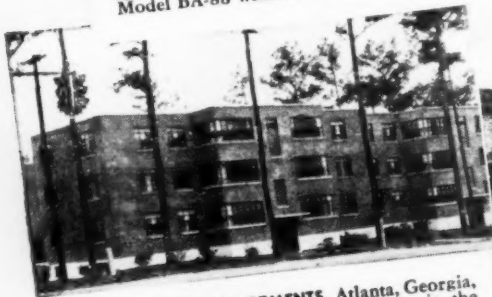
Leaders in the housing field have found that with this improved system, original equipment and operation-maintenance costs are *lower* . . . complaints and equipment failures are *fewer* . . . buyer and tenant comfort and satisfaction is *greater*! *Personalized Heating*, with Bryant *project-proved* automatic heating equipment, means a new high in *comfort* and *convenience* . . . a new high in *operating efficiency* . . . a revolutionary simplification in *design*, *construction* and *management*. It's the new *success factor* in mass and multi-family housing!



PARKLAKE APARTMENTS, Boston . . . birthplace of *Personalized Heating*. 152 luxurious suites, individually winter air-conditioned by Bryant Model VBs, world's most successful vertical units.



BOYSTOWN. New 3-million-dollar addition to Father Flanagan's famous *Boystown*, Nebraska, houses teenage boys in cottages like these. Heated by Bryant Model BA-88 winter air conditioners.



PEACHTREE HILLS APARTMENTS, Atlanta, Georgia, are among the newest and most modern in the South. Owners chose *Personalized Heating* with Bryant Model VB winter air conditioners.



GREENWOOD GARDENS is a Philadelphia row house development, one of several similar projects in the West Oak Lane section of the city that uses a total of over 2,000 Bryant Model GF-56 Gravity Warm Air Furnaces.



PERSONALIZED HEATING means radiation heating, too! Above is ARNA Valley, Arlington, Va., where more than 600 suites in 8-family buildings are individually heated by Bryant Model 26 boilers.

ers, builders and operators of the Nation's Top and **MASS HOUSING DEVELOPMENTS**

in 1948!

**... THOUSANDS OF RESIDENTS OF
NEW MULTI-FAMILY CONSTRUCTION
WILL ENJOY THE ADVANTAGES OF
BRYANT PERSONALIZED HEATING!**

● *North, east, south, west...* you'll find Bryant *Personalized Heating* installations in new multi-family projects all over the country, among them the Tremont Apartments, Allentown, Pa.; Pine Tree Village, Winnetka, Ill.; Allenhurst Gardens, Amherst, N. Y.; and more than a dozen projects in and around Houston, Texas. In many of these new developments you'll find Bryant *Modernaires*, newest vertical winter air conditioners, paired with gleaming white Bryant water heaters, installed in the *same* small utility closet. With this system, residents will have complete control of all space and water heating equipment serving their homes.

These installations will save owners and operators many thousands of dollars in space, building, installation and maintenance costs. How do we know? Because we've *proved* it hundreds of times in housing all over the country. And we can prove it in *your* project! Ask the Bryant representative nearest you to show you the proof in facts and figures with the illustrated presentation, *Bryant Personalized Heating*.



Photograph of an actual Bryant *Personalized Heating* installation, showing winter air conditioner and water heater installed in a small closet.



Let the pup be furnace man

bryant

AUTOMATIC HEATING

BRYANT HEATER COMPANY • CLEVELAND, OHIO

One of the Dresser Industries

New Decorative Alumigrid

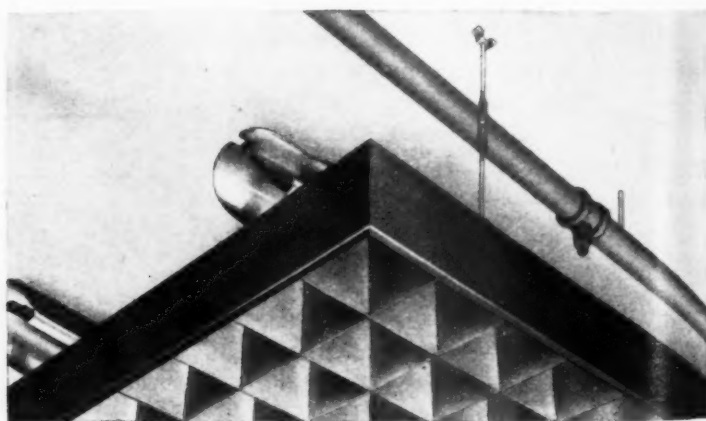
The Modern Ceiling for Modern Interiors

Kawneer's aluminum louvred ceiling—

- Handsome, contemporary styling
- Efficient, non-glaring illumination
- Easy to install—Economical to use
- For new construction or remodeling



Easy-to-install Alumigrid units are 4-foot square and weigh only 10 pounds. Supported by a framework of aluminum rails, these units are easily lifted aside for re-lamping or maintenance work on ceiling elements above.



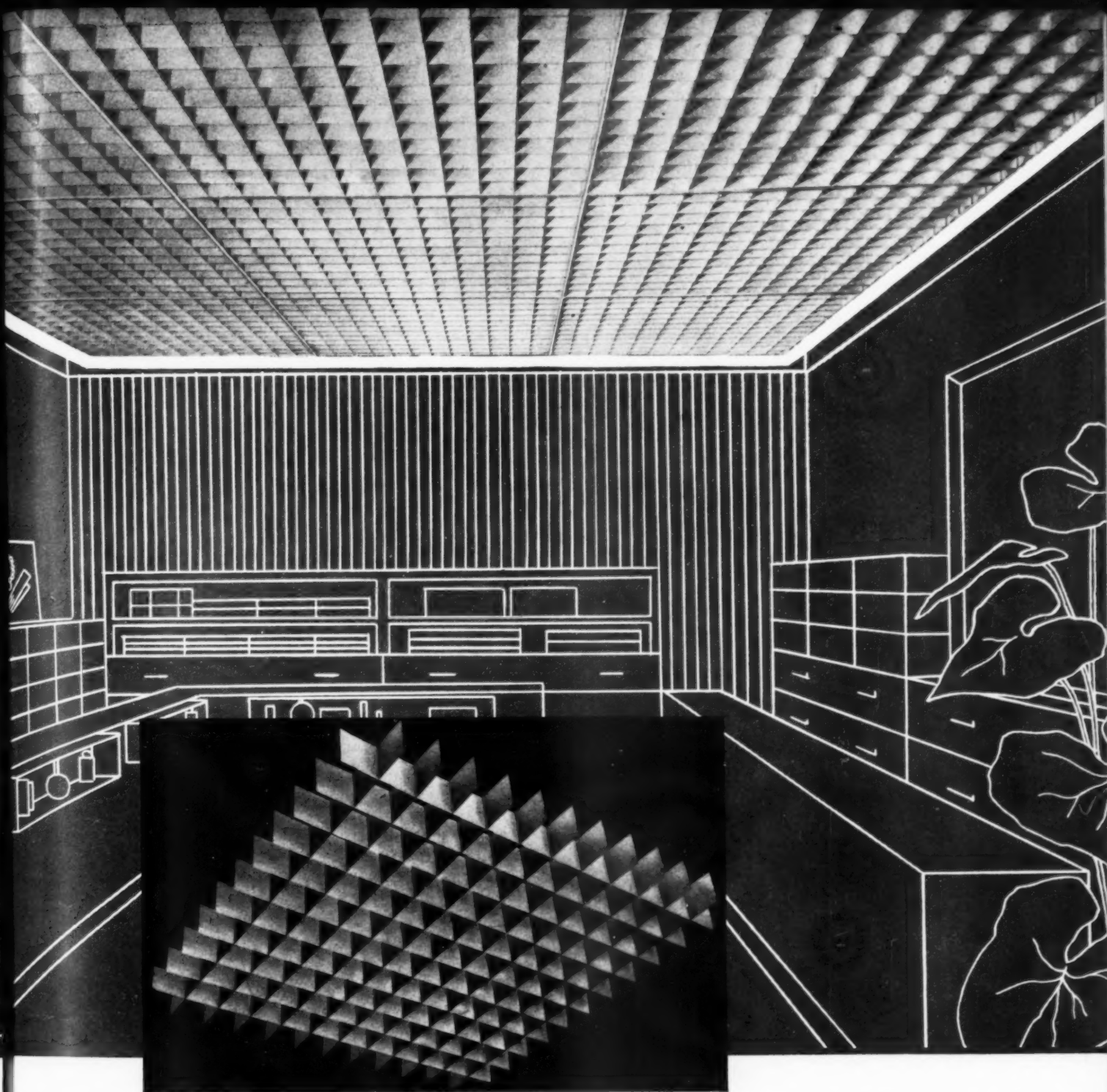
A perfect ceiling treatment for remodeling work or new construction, Alumigrid is suspended and anchored from the ceiling overhead. It conceals beams, pipes, ducts, sprinklers, and electrical systems.

See our exhibit at the **STORE MODERNIZATION SHOW** July 6th to July 10th
Grand Central Palace, New York City



**FOR
SC**

No mo
sider t
Its c
moder
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FOR STORES • SHOPS • RESTAURANTS • HOTELS • CLUBS SCHOOLS • HOSPITALS • OFFICES • AUDITORIUMS

No matter what type of building you are designing, consider the unprecedented advantages offered by Alumigrid.

Its clean-lined, simple styling harmonizes gracefully with modern interior design—while concealing such unsightly overhead elements as beams, pipes, ducts, sprinkling systems. A soft satin finish enhances its appearance and increases its light diffusion factor.

Illumination through Alumigrid is exceptionally uniform and efficient. Its many squares diffuse and reflect light downward to provide pleasant, eye-level illumination throughout the room.

Alumigrid is easy and economical to install because it is suspended below the ceiling without interfering with its structural elements. The lightweight 4-foot square units are

supported by a framework of aluminum rails which are securely anchored to the ceiling.

Each Alumigrid unit weighs only ten pounds and is quickly slid to one side for re-lamping or maintenance work on ducts, sprinklers and wiring.

This outstanding new ceiling is available now—for the job on your drafting board—so write today for specifications and installation instructions. The Kawneer Company, 121 North Front Street, Niles, Mich., or 2541 8th Street Berkeley, California.

THE
Kawneer
COMPANY

NOW... a better, heavier, stronger

TRUSCON DOUBLE-HUNG RESIDENTIAL STEEL WINDOW

● This outstanding window is an original development by Truscon. It is an economically priced unit in the popular double-hung design, and enjoys widespread use in residences, schools, hospitals, office buildings, etc. Recent construction developments in the Series 138 Truscon Double-Hung Steel Window include:

HEAD — Motor-spring type spring balances with Enduro stainless steel tapes. Two balances for each sliding sash. Windbreak flange set back to allow room for lintel.

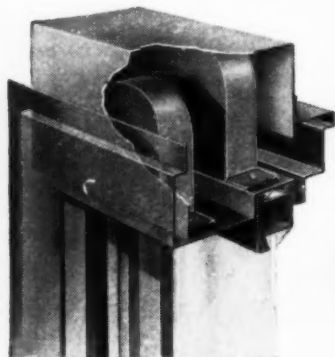
MEETING RAILS AND SASH — Stainless steel weatherstripping attached to sash at head and sill provides an effective seal against air infiltration along all weathering contacts. Interlocking tubular sash rails with stainless steel weatherstripping, lift handles, sweep lock, strike and pull-down handle, rust-proofed and painted to match window. 18 gauge sash members.

JAMBS — Full length stainless steel weatherstripping attached to frame members at jambs assures weather-tightness and also serves as sash-way for both upper and lower sash for easier operation. Plaster stop provided on interior and rebate for screens and storm sash on exterior. Deep bead. 18 gauge jamb frame members.

SILL — Double step design affords two point weathering contact with sash. Heavy 16 gauge steel for strength and rigidity.

In addition to all these features, sizes of the Series 138 Truscon Steel Window have been changed to agree with principles of modular planning. Another important feature is the tubular construction of the sash members adding greatly to the strength, durability and finished appearance of the window.

Write for new catalog giving complete mechanical details, types and sizes and instruction details.



Spring Balances



Sweep Lock



Pull-Down Handle



Lift Handle

Standardized STORM SASH AND SCREEN

Frames of the Series 138 Truscon Window are prepared to receive screens and storm sash of the simplest and most economical type, as made by Truscon.

Manufacturers of a Complete Line of Residential Double Hung Windows . . . Residential Casements . . . Security and Basement Windows . . . Screens and Storm Sash . . . Metal Lath Products . . . Industrial Steel Doors . . . Coal Chute Doors . . . Steel Lintels . . . Concrete Bars . . . Welded Steel Fabric.

TRUSCON STEEL COMPANY

Reg. U. S. Pat. Off.
YOUNGSTOWN 1, OHIO • Subsidiary of Republic Steel Corporation

EASY
TO SEE WHY
THEY'RE
CH*
boosters



**We mean Convection Heating*

Thanks to the heating contractor who recommended *Convection Heating . . . and Tuttle & Bailey Recessed Convectors!

A combination that meets every requirement home owners demand from heat distribution equipment . . . efficient heat transmission that means real comfort . . . economical operation that saves on fuel costs . . . appearance that harmonizes with modern furnishings.

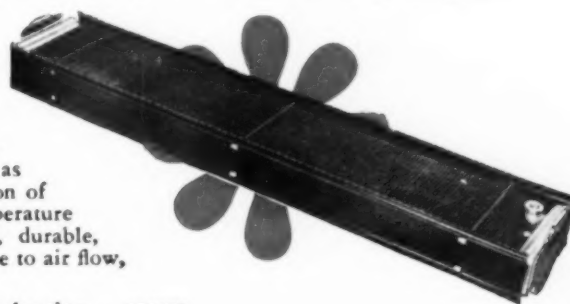
And a plus value to you, Tuttle & Bailey Standardized Convectors (Recessed or Cabinet Types) are stocked for quick delivery . . . conveniently packaged for easy handling on the job.

**ALL-COPPER HEATING ELEMENT
MAKES A DIFFERENCE!**

Fins, tubes, headers . . . Tuttle & Bailey heating elements are constructed entirely of copper. With conductivity approximately seven times faster than iron, twice as fast as aluminum, copper means quicker transmission of heat from boiler to rooms, raising room temperature levels faster. Elements are light in weight, durable, sturdy . . . engineered for minimum resistance to air flow, maximum contact with fins.

"Inside facts" that mean *better* heating . . . assure lasting customer satisfaction.

TUTTLE AND BAILEY, INCORPORATED
NEW BRITAIN, CONNECTICUT



ASK YOUR JOBBER TODAY

TUTTLE & BAILEY inc

Standardized COPPER CONVECTORS

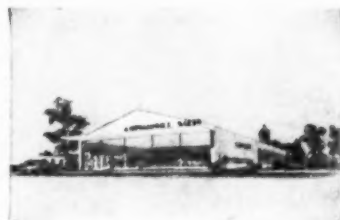
LURIA INDUSTRIAL BUILDINGS

NOW IN PRODUCTION

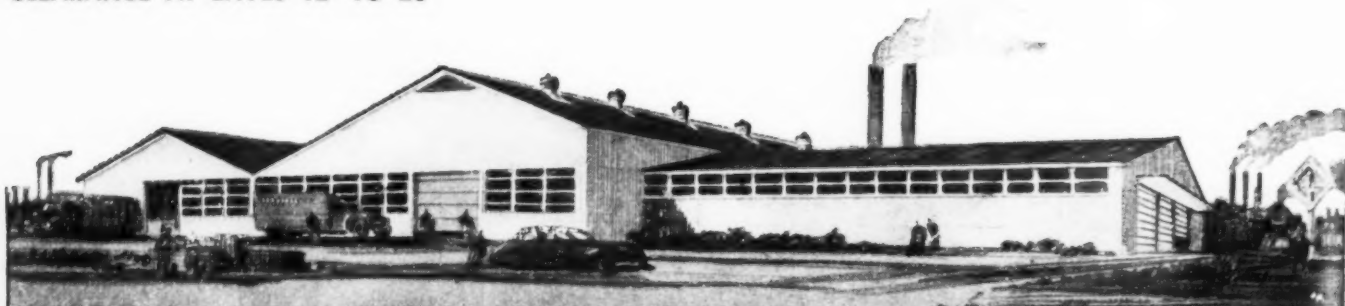
Luria offers a complete line of Standard Buildings specifically planned to be adaptable for all industrial requirements. Several basic types in a wide range of sizes can be used individually or in a variety of combinations.

Luria buildings are permanent structures fabricated from heavy structural steel and designed to comply with the latest building codes. A choice in the use of collateral materials and the location and type of doors and windows increases the utility and allows complete freedom in architectural treatment.

**BASIC UNIT WIDTHS 40' TO 100' CLEAR SPAN
LENGTH ADJUSTABLE IN INCREMENTS OF 20'
CLEARANCE AT EAVES 12' TO 20'**



**ADAPTATIONS OF
STANDARD UNITS**



LURIA ENGINEERING CORPORATION

500 Fifth Avenue
New York 18, N. Y.

1734 Candler Bldg.
Atlanta 3, Georgia

Fidelity Philadelphia Trust Bldg.
Philadelphia 9, Pa.

Chamber of Commerce Bldg.
Boston 10, Mass.

First National Bank Bldg.
Chicago 3, Illinois

LOOK... ONE REASON FOR *ELKAY* *Lustertone!*



AND there are many more good reasons for installing Lustertone Stainless Steel Sinks:

- Won't chip, peel, flake or wear off—never will discolor—always retains original new look.
- One-piece bonded construction eliminates all seams—no crevices to hide dirt and germs.
- Hot utensils can't mar the lustrous surface. Never a crack or craze from waste food disposer or automatic dish-washer action.
- Millions now know Stainless Steel means utmost permanence, sanitation and lasting beauty.
- Available in seven popular sizes ranging from 54 to 96 inches. Supplied with quality cabinets, or sold to fit other cabinet lines.

Guaranteed to outlast any home in which it is installed.

CUSTOM BUILT

ELKAY Stainless Steel is the one best answer when continuous surfaces are desired—without seams or crevices.

WRITE TODAY

for catalog and prices or consult 23 a 6 Sweet's Architectural File.



ELKAY MANUFACTURING COMPANY
1872-F South 54th Avenue, Chicago 50

STAINLESS STEEL SINKS

Made only by ELKAY—oldest manufacturer of Stainless Steel Sinks—established 1920

SHIELD

YOUR NEW

MASONRY



HOMES against destructive dampness
with **BONDEX** cement paint.

Dependable, low-cost **BONDEX** also
adds color and protects the surface.

You seal moisture out and satisfaction in when you paint a
new home with Bondex Cement Paint. One treatment checks
moisture, adds color distinction, preserves.

Bondex is ideally suited as a finish for modern building materials. Its reputation for performance has been established in
all types of climates in more than 90 countries. To build lasting
goodwill with homeowners rely on Bondex.

*Use **BONDEX** on exterior walls, basement walls and foundations
of these types: STUCCO • CONCRETE OR CINDER
BLOCK • BRICK • MASONRY • BUILDING TILE • STONE
ASBESTOS SIDING*

for color chart write ... **THE REARDON COMPANY** • St. Louis 6,
Chicago 9 • Los Angeles 21 • Montreal 1 • Bayonne, N. J.

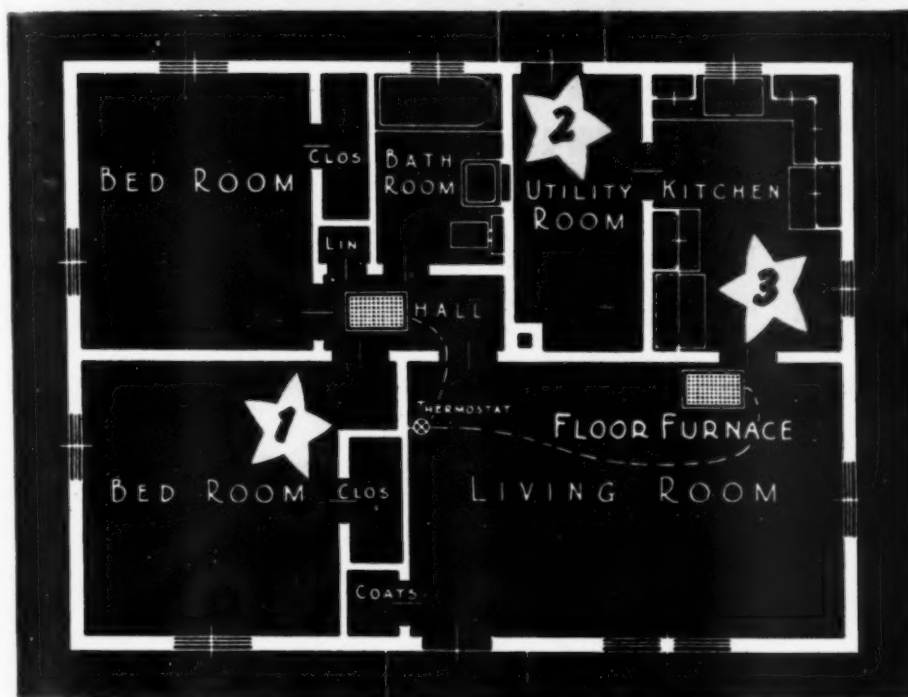
PUT PERSONALITY
INTO YOUR HOMES
WITH THESE 12
BONDEX COLORS...

Dutch White
Oyster Shell
Old Spanish White
Antique Ivory
Carthage Cream
Adobe
Tropical Coral
Spanish Buff
Monastery Gray
Grotto Blue
Ivy Green
Brick Red
also
Pure White

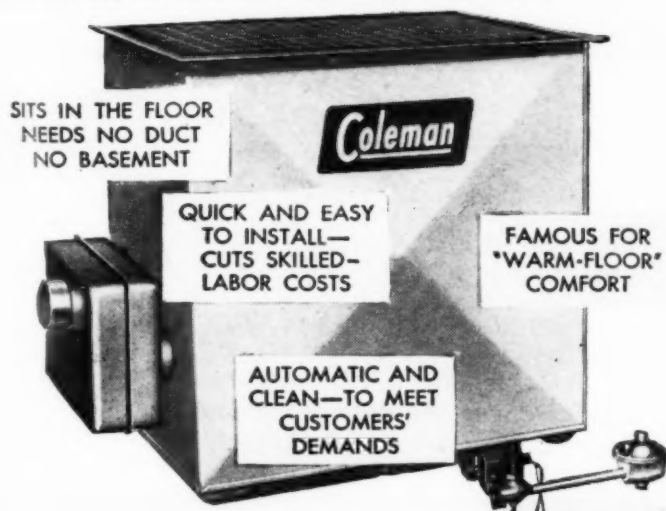
BONDEX

THE *Patented*
CEMENT PAINT
that outsells all other
cement paints combined

More vital than ever in today's building market: These Cost-Cutting, Labor-Saving, Better-Heating Coleman Floor Furnaces



This typical Coleman floor-plan shows how a "multiple installation" of floor furnaces furnishes perfect heating, yet costs less than the big central furnace this design would need.



America's Largest Selling
FLOOR FURNACE

Coleman

"Star Savings" that help you meet sales resistance

They're really "star" savings — for they help you cut building cost without cutting quality or heating comfort — and often actually help improve design!



1 Saves excavation and basement cost: No basement needed. You can give "more house" for the money.



2 Usually costs less than central furnace, and you save utility-room space, too. This often permits better floor planning.



3 Saves duct expense: No expensive duct work on a Coleman.

Coleman national ads make these Floor Furnaces powerful selling features, for you

Yes — they not only save money for you and your buyers; Coleman Floor Furnaces also help you close sales. You get easier, quicker sales because millions of magazine readers have read in Coleman's national advertising how Coleman Floor Furnaces save and cut fuel bills. They know these new automatic furnaces mean better heating, and "warm-floor" comfort.

Write, today, and learn how small-home builders everywhere are using Coleman Floor Furnaces to cut building costs and provide better heated homes. Models are available for gas, oil and LP Gas — sizes from 25,000 BTU to 70,000 BTU; flat-register models or dual-wall-head types.

The Coleman Company, Inc., Dept. AB-663, Wichita, Kans.; Philadelphia; Los Angeles

The Coleman Co., Inc., Builder's Contract
Dept. AB-663, Wichita 1, Kansas
Send me free information about your special
cooperation for builders and contractors.
Also send Floor Furnace Builder's Catalog.

Name _____
Address _____
Town _____ State _____



NATIONWIDE
Roddiscraft
 WAREHOUSE SERVICE



THERE'S one way to be sure of the best — stock Roddiscraft flush doors and hardwood plywood.

Roddiscraft doors and plywood have the two essential elements of quality — the finest materials, plus skilled craftsmanship.

Veneers from our own northern hardwood timber tracts—seasoned hardwood crossbandings, selected kiln-dried core blocks—skillfully molded by Roddis men

with a fifty year heritage of craftsmanship and knowledge of wood.

You can see the signs of craftsmanship in the beautifully matched faces, in the silken surfacing — in the clean edges — in the square, true cut.

Yes — compare Roddiscraft point by point, see for yourself why Roddiscraft is the one way to assured quality.

Roddiscraft *Roddis Lumber & Veneer Co.*
 MARSHFIELD, WISCONSIN

Norge Electric Ranges fulfill your specifications

FOR MODERN
PERFECTION



Modern apartment buildings are designed for utmost utility...for greater comfort and convenience...for new beauty. So, too, are Norge appliances! Norge products provide maximum comfort and satisfying economy. For Norge engineers are

fulfilling the pattern for modern living with appliances styled to complement good room design, and constructed for functional efficiency. Norge Division, Borg-Warner Corp., Detroit 26, Mich. In Canada: Addison Industries, Ltd., Toronto, Ontario.

A BORG-WARNER INDUSTRY

Refrigerators • Electric Ranges • Water Coolers
Washers • Electric Water Heaters • Home Heaters
Gas Ranges • Home Freezers

SEE
NORGE
BEFORE YOU BUY



You Can Count On
NEW ADVANCE-DESIGN CHEVROLET TRUCKS
For More Value — In More Ways — On Your Job

Business leaders everywhere recognize the new high value of these latest and greatest Advance-Design trucks! You'll agree, too—once you see and once you try these trucks that represent the supreme achievement of advanced engineering. And they're the lowest-priced trucks in the volume field! Model for model, and with comparable equipment and specifications, they *list for less than competitive makes*—some models as much as \$150. See them at your dealer's now.

CHEVROLET MOTOR DIVISION, General Motors Corporation,
 DETROIT 2, MICHIGAN

**CHOOSE CHEVROLET TRUCKS FOR
 TRANSPORTATION UNLIMITED**

**Only Chevrolet Advance-Design Trucks for 1948
 Have All These New and Finer Features**

**NEW CHEVROLET 4-SPEED
 SYNCHRO-MESH TRUCK
 TRANSMISSION**

A special feature in heavy-duty models that assures new operating ease and efficiency.

**NEW ADVANCE-DESIGN
 GEARSHIFT CONTROL**

A steering column gearshift in models with 3-speed transmissions provides greater driving ease and convenience.

**NEW FOOT-OPERATED
 PARKING BRAKE**

A feature that offers new clear floor area, safety and efficiency in models with 3-speed transmissions.

**NEW IMPROVED
 VALVE-IN-HEAD ENGINE**

The world's most economical engine for its size now has greater durability and operating efficiency.

**SPLINED REAR-AXLE SHAFT
 ATTACHMENT TO WHEEL HUBS**

Greater strength and durability in heavy-duty models with this exclusive Advance-Design feature.

PLUS The Cab that "Breathes"

- Uniweld, all-steel cab construction
- New, heavier springs
- Full-floating hypoid rear axles on ¾-ton and Heavy Duty models
- Specially designed brakes and Hydrovac Power brakes on Heavy Duty models
- Ball-bearing steering
- Double-line pre-selective power shift in 2-speed axle at extra cost
- Wide base wheels
- Standard cab-to-axle-length dimensions
- Multiple color options.

*Fresh air heating and ventilating system optional at extra cost.



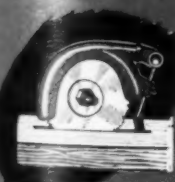
Take this low-cost Portable Saw-Shop to your job!



It's a CUT-OFF saw!



It's a MITER saw!



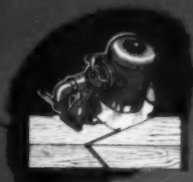
It's a RIP saw!



It's a SAND machine!



It's a ROUTER!



It's a VARIETY saw!



It's a SHAPER!

This ever-popular, low-cost DeWalt is easy to carry from job to job. When you put it to work you actually have a "saw-shop" on the job, because every time you change the cutting tool, you have *another* machine!

To build more and better houses faster—builders use this portable, low-cost DeWalt. Because most of its working parts are now of light-weight, heat-treated aluminum, operators find it easier to handle—safer than ever before—and it does the fast, accurate work they want. It's a machine you can get quickly. Write for catalog. DeWalt, Inc., 16 Fountain Avenue, Lancaster, Penna.

ALL THESE AND MORE
IN ONE . . . and for
THE PRICE OF ONE!

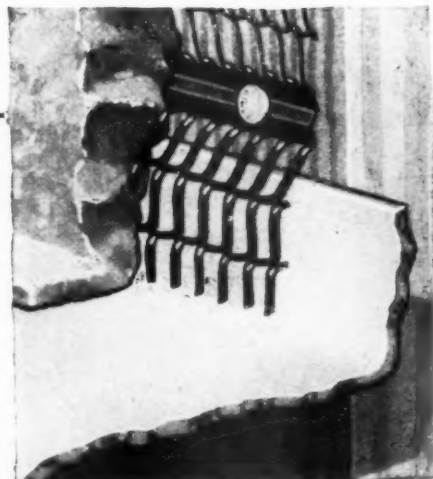
DeWALT

THE SAW THAT'S FIRST WITH BUILDERS



none of this with a Briggs bathtub—it's leakproof!

No dripping ceilings under Briggs Beautyware bathrooms! These revolutionary die-formed steel fixtures take care of this problem—and untie every *other* knot in the business! Briggs bathtubs are *lighter*—(only 110 pounds), and stronger. Briggs tubs are *safer*—thanks to the patented Safety-Bottom, the helpful hand grip. Briggs tubs give you *uniform quality*: every tub is furnished in stainproof (acid-resistant) porcelain enamel. Briggs fixtures fit *exactly*—because of their close tolerance engineering. Yet with *all* these extras, Briggs fixtures are modestly priced! Write now for new catalog featuring Briggs plumbing fixtures and Briggs brass. Briggs Manufacturing Company, 3025F Miller Avenue, Detroit 11, Michigan.



Briggs solves the danger of leaks at tub-wall line—with an integral lip flange. This provides a perfect flashing—a permanent water seal—tub to walls.

BRIGGS *Beautyware*

New Fittings

for EMT Thin-Wall Conduit

(Electrical Metallic Tubing)

EASY TO INSTALL

in close quarters and in corner locations



PERMANENT GROUND

VIBRATION PROOF

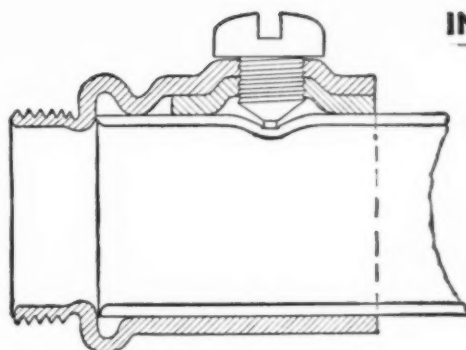
CLOSE, ACCURATE FIT

EASY TO INSPECT

RE-USABLE

ECONOMICAL

NO WRENCH STRAINS ON BOXES



INSTALLED WITH SCREWDRIVER

UNIFORM, SAFE
HOLDING ACTION

SIMPLE, STRONG, PRESSED-
STEEL CONSTRUCTION

ELECTRO-GALVANIZED

APPROVED BY UNDERWRITERS'
LABORATORIES, INC.

*Sold Through Leading
Electrical Wholesalers*



*Steel for Permanence —
Grounded for Safety!*

National Electric Products Corporation
Pittsburgh 30, Pa.

Beauty IN THE BATHROOM THAT Endures



Sizes: 36" x 36" x 80",
40" x 40" x 80".
Corner cabinet.

Terrazzo receptor. White Bonderized enameled aluminum alloy cabinet. Underwriters approved lights. Chromium plated brass door. Non-clogging shower head. 6" center valves. Soap dish.

TODAY, in their bathrooms, new home owners want the luxury of modern design in shower cabinets combined with utility and real durability. Now Tile-tone, and only Tiletone, offers a shower cabinet that really graces any bathroom no matter how luxurious. It is Model 75. Here is a shower cabinet that is con-

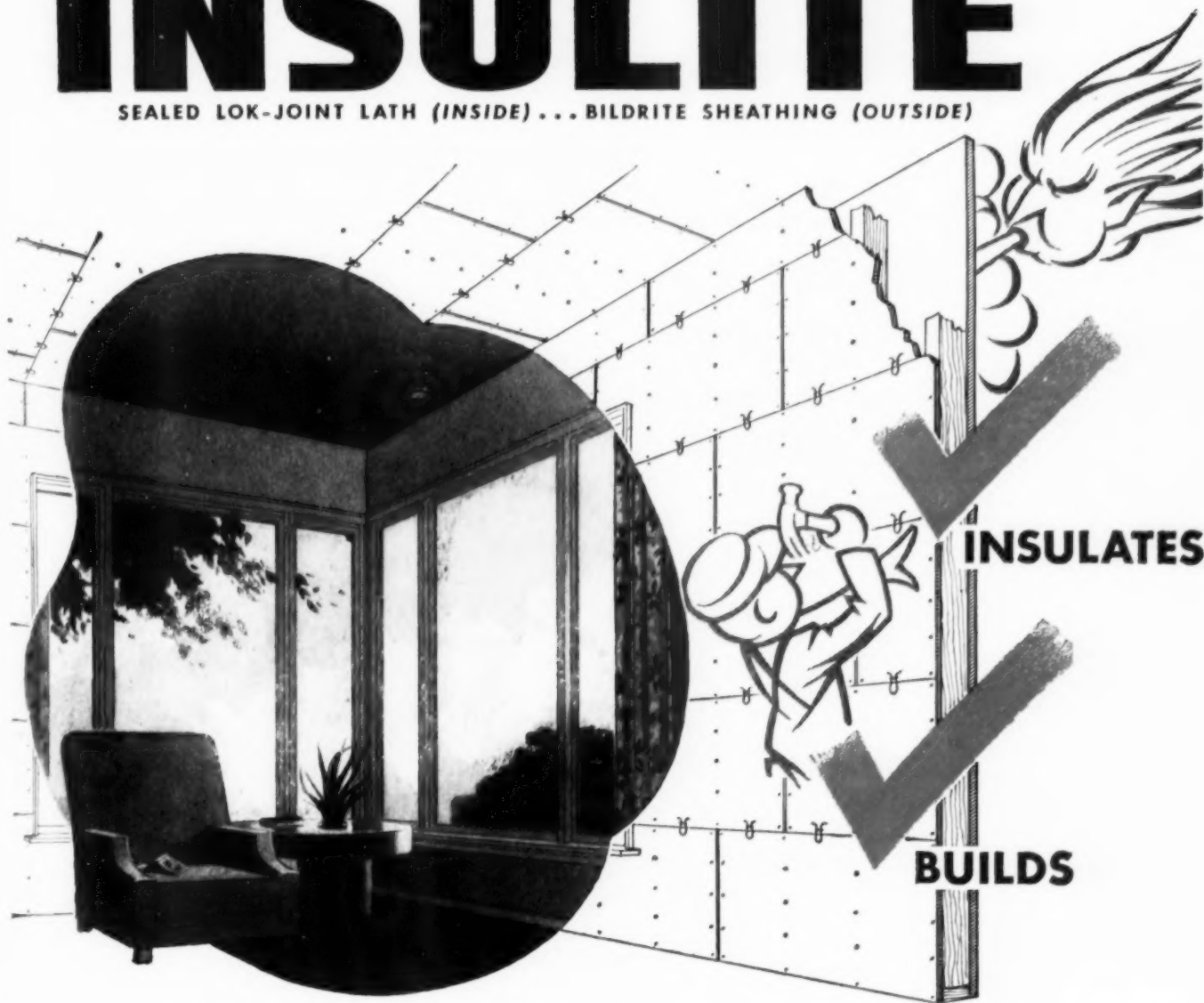
structed to hold up better—is durable. Made of aluminum alloy, it is non-rusting and is protected by a Bonderized baked enamel finish. Model 75 has a new improved terrazzo receptor—shoulder height shower head, is lighter, yet rigid . . . solid! So it's easier to handle, easier to install.

MODEL **75** **TILETONE**
Shower Cabinet

TILETONE COMPANY • 2323 WAYNE AVENUE • CHICAGO 14, ILLINOIS

DOUBLE DUTY INSULITE

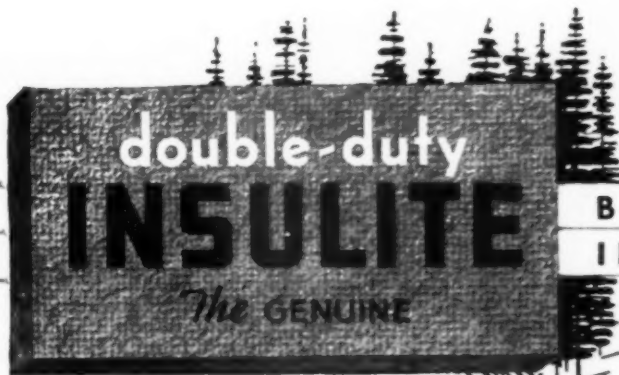
SEALED LOK-JOINT LATH (INSIDE) . . . BILDRITE SHEATHING (OUTSIDE)



You help yourself as well as your customer when you build this wall—*inside* and *outside*—with Double-duty Insulite. It nails up faster, fits easily, saves time all along the way. Builds a better home because it *insulates* as it builds. Remember, too, that Bildrite on the outside and Sealed Lok-Joint on the inside, guards against inner wall condensation.

INSULATES AS IT . . .
BUILDS AS IT

INSULITE DIVISION  MINNESOTA & ONTARIO
PAPER COMPANY
MINNEAPOLIS 2, MINNESOTA



BUILDS
INSULATES

"Insulite" is a registered
trade mark, U. S. Pat. Off.

Kitchen Planning with

ANDERSEN *Windowalls*



LIONS CLUB MODEL HOME, MINNEAPOLIS... ARCHITECT: ROBERT CERNÝ

To satisfy the woman of the home (and she is mighty important), ANDERSEN WINDOWALLS are called upon to brighten the kitchen, open its workroom space to a view of the outdoors, ventilate it effectively the natural way in summer, and keep it snugly weathertight in winter.

In this home two Andersen Casement Window Units,

Number 4326, with one-light glazing, have been arranged into a wall of windows.

ANDERSEN WINDOWALLS are sold only through regular lumber and millwork dealer channels. See your millwork distributor or write us for further information.

*TRADEMARK OF ANDERSEN CORPORATION

Andersen Corporation

BAYPORT • MINNESOTA

Never an Uncomfortable Moment in Our House

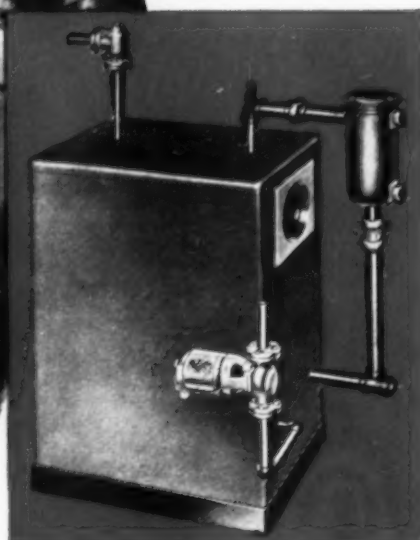
...We have **Hydro-Flo Heating**



A feature with proved sales appeal to home buyers

The home equipped with B & G Hydro-Flo Heating is truly a haven of luxurious winter comfort! Whether the heat distributing units are radiators, radiant baseboards, convectors or radiant panels, this *forced hot water* system provides the finest in automatic, controlled heating.

B & G Hydro-Flo Heating owes its country-wide spread in popularity to its genuine merit—proved over and over again in thousands of homes! It is the system which affords the *instant, positive control* of heating so essential to real comfort . . . delivering just the right amount of heat for any weather condition. No overheating in mild weather and no lack of heat when the thermometer hits bottom. At all times, indoor temperature is maintained steadily at whatever degree is preferred. Naturally this precise measuring out of heat means utmost fuel economy.



B & G Hydro-Flo Heating equipment can be installed on any hot water heating boiler. Its extreme simplicity is a warranty of dependable operation.

Year 'round hot water a bonus feature

Where a B & G Hydro-Flo Heating System is installed, no separate water heater is required. The same boiler that heats the house also heats the domestic water—not only in winter but *all around the calendar!* What feature could have more appeal to the woman of the house than a bountiful supply of piping hot water . . . always ready for kitchen, laundry and bath . . . day and night.



BELL & GOSSETT

Dept. A0-11, Morton Grove, Ill.

*REG. U. S. PAT. OFF.

Company



Send for this new 4-color booklet—it tells the complete story of B & G Hydro-Flo Heating Systems.



Don't Miss

THE NEW RHEEM PROMOTION PLAN for Small-Home Builders!

NOT long ago we visited some model homes. We talked to people inspecting them. *We found out what prospective home buyers want to know.*

They want to know a lot... much more than any busy builder has time to tell them personally.

What kind of pipes? What type of insulation? What kind of cooking range? What make of furnace? What brand of water heater?

You put into the houses you build, the best materials, the best brands of appliances you can find. How can you tell each prospect what your house offers?

We have a way.

We have constructed a large, beautiful portfolio in full color, called the "Home Buyer's Guide." It is dignified, impressive, wholly in keeping with the importance of the subject.

The inside pages of this handsome piece are divided into pockets into which we will insert attractive literature which describes in detail the Rheem equipment installed in your houses. From your other suppliers you can obtain and insert literature on building material, in-

sulation, paint, plumbing fixtures and kitchen appliances.

You can include financing plans—your own, the local bank terms or F.H.A. plan. You can include *all* the facts about your new homes!

No Rheem advertising appears on this portfolio. But *your name and address* will be handsomely imprinted (at *no cost* if you are a Rheem customer). The portfolios are shipped to you in the quantity you need. You simply insert the literature, put a supply of the "Home Buyer's Guide" on display in each of your model homes and sales offices and invite every prospect to take one free.

Thus, the whole story of your new homes is presented in a single package—a striking portfolio that your prospect takes along with him. It's a new way to merchandise your new homes. It's an entirely new kind of service to builders from Rheem, world's largest maker of water heaters and one of the foremost manufacturers of Home Comfort Appliances.

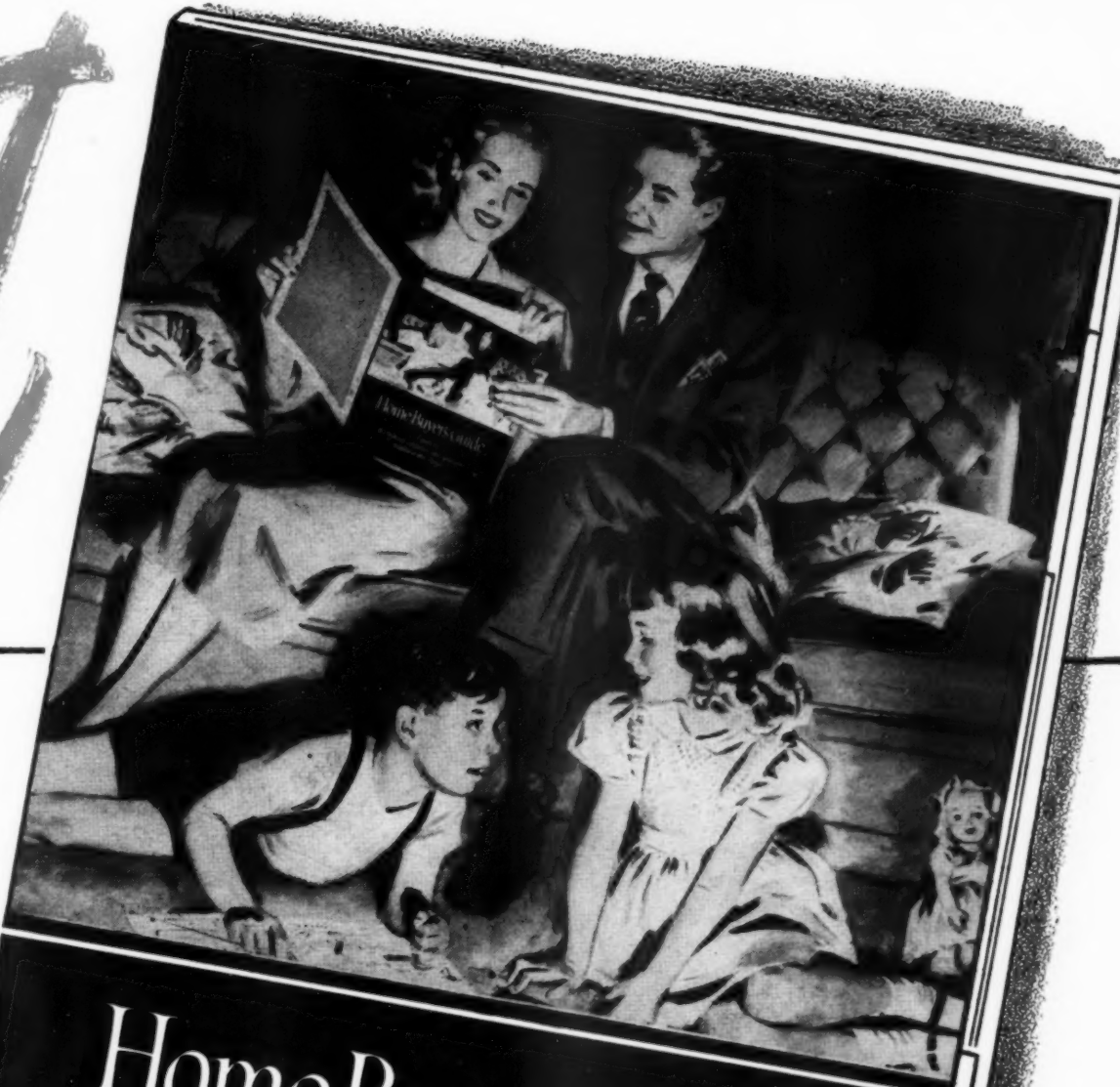
Fill in your name and address on the coupon below and mail it today. Our representative will call to show you a sample of the "Home Buyer's Guide" and take your order. NO obligation, of course. Do it now.

Rheem Manufacturing

HOME COMFORT APPLIANCES

Automatic Water Heaters • Central and Space Heating Equipment • Soft Water Appliances • Boiler and Tank Units

it



Home Buyer's Guide

The Home Buyer's Guide

A guide to trials, appliances, and equipment called in this House

1. A beautifully illustrated portfolio with your name imprinted.
2. All facts about your new homes in a single package.
3. Stays with your prospect while he's making the decision.

ACTUAL
SIZE
9 1/4" x 13 1/2"

Rheem Manufacturing Company

9 plants in U.S.A.—also Brisbane, Melbourne, Sydney, Rio de Janeiro, Singapore, and Hamilton, Canada.



Rheem Manufacturing Company
Dept. AB-6
570 Lexington Ave., New York 22, N. Y.

Please have your representative call to show me a sample of the Home Buyer's Guide. I understand there is no obligation.

NAME _____

ADDRESS _____

CITY _____ STATE _____



"I'm a professional man . . . but I'm also a *business man*"

"As an architect, I am in constant touch with technical improvements in the building field. As a business man . . . I know that I must *also* keep in close touch with the building trends that interest my best clients. That's why I'm interested in House & Garden.

"Here is a magazine that reflects the taste I believe in . . . that brings its readers useable ideas that I can translate into blueprints. Time and again, a client brings me a photograph from House & Garden . . . or we consult my file of House & Garden reprints for an answer to the problem. I'm not surprised that architects like myself vote House & Garden the best authority in its field."

House & Garden

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A Condé Nast Publication

10,000 architects and building supply dealers receive House & Garden's building reprints each month . . . this is the Golden Touch in action!

No.241 *Standard of the World*

AND OVER IN BACK HERE,
STREAMLINED SWAGING --
NO TOOL MARKS

NON-RISING PIN,
SELF SEATING
NO TWISTING, NO TURNING

SMOOTH, SQUARE
CORNERS

CLEAN, ACCURATE
COUNTERSINKING

SUPERIOR
FINISH

SMOOTH JOINTS
NO BURRS

CORRECT NUMBER AND
SIZE OF
SCREWS

SPECIFIED BY
MOST BUILDERS

DISTINCTIVE
PACKAGING

THE STANLEY WORKS
New Britain, Conn.

STANLEY

Reg. U. S. Pat. Off.
HARDWARE • HAND TOOLS • ELECTRIC TOOLS

REMEMBER

THREE HINGES TO A DOOR

ONLY \$25* per 1000 square feet for both Insulation and Vapor-Barrier

(*approximate contractors' price)

with

SISALATION
REFLECTIVE INSULATION

Available
Now!



1 This modern insulation is effective, since SISALATION is equivalent in heat-saving values to about $\frac{3}{4}$ -inch of flexible or rigid types of quality insulations . . . based on M.I.T. tests on side-walls constructed with a single layer of reflective SISALATION applied in the stud area.

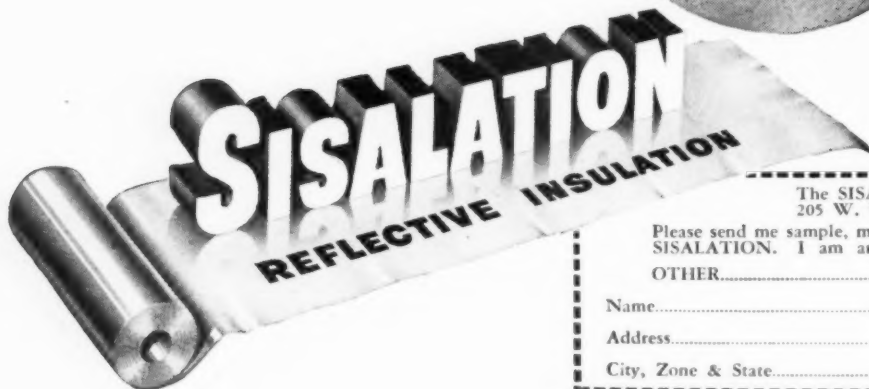
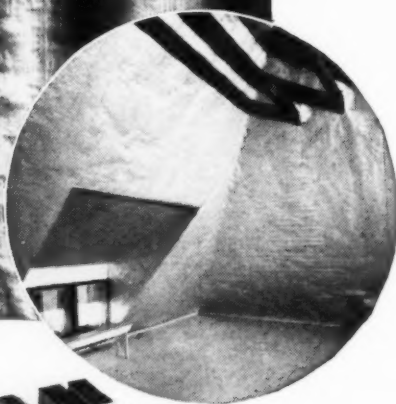
2 SISALATION, at the same time, acts as a VAPOR-BARRIER, thus protecting against dry-rot, condensation and paint failure. Meets FHA vapor-barrier requirements, Class A, Fed. Spec. UU-P-147.

3 SISALATION, heavily reinforced, is so strong that one man applies it over two stud spaces at one time without risk of SISALATION tearing. This means low application costs.

4 SISALATION deflects sun-heat and does not absorb or store up heat, thus keeping the home much cooler in summer. Makes attics more attractive and livable.

5 SISALATION is available NOW for prompt delivery through your lumber or building supply dealer.

The SISALKRAFT Co.
205 W. Wacker Dr., Chicago 6, Ill.
New York 17, N. Y.
San Francisco 5, Calif.



The SISALKRAFT Co., Dept. AB
205 W. Wacker Drive, Chicago 6, Ill.

Please send me sample, more information, and tell me where I can buy SISALATION. I am an ☐ ARCHITECT ☐ CONTRACTOR
OTHER.....

Name.....

Address.....

City, Zone & State.....



CHECKED FROM EVERY ANGLE



BRADLEY
PRE-FINISHED
STRAIGHT-LINE
HARDWOOD FLOORING
IN OAK, BEECH & PECAN

GIVES EXTRA VALUE...

EXTRA VALUE in Proper Seasoning

EXTRA VALUE in Straight-Line Ripping

EXTRA VALUE in Precision Machine Work

EXTRA VALUE in Laying Up Without Forcing

EXTRA VALUE in 90° End Joints That Stay Put

EXTRA VALUE in Uniform Color and Texture

EXTRA VALUE in Factory-Applied Finish

EXTRA VALUE in Lasting, Lustrous Beauty

EXTRA VALUE in Customer Satisfaction

These extra values are the tangible results of continuous years of our determined effort to make a better flooring. They symbolize Bradley's purpose to give each user a *premium* with his investment in fine flooring. They are the reasons why Bradley dealers increase their flooring turn over.

*There's a Bradley representative
within reach of your telephone.*



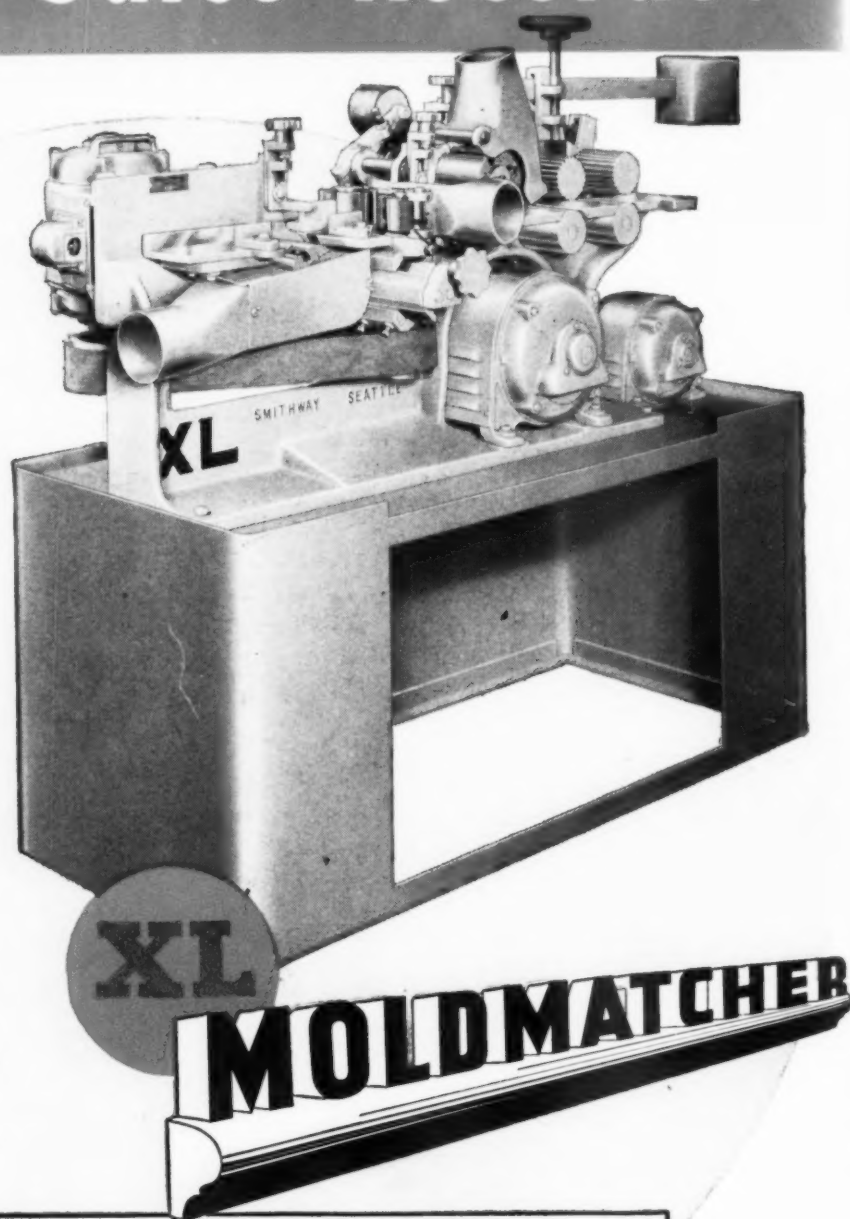
BRADLEY LUMBER COMPANY of Arkansas
V A R R E N , A R K A N S A S



Sensational New Moulder Breaking Sales Records!

Here's Why!

- ① **COSTS SO LITTLE!**
About 1/5 the usual price of a moulder.
- ② **PRODUCES SO MUCH!**
2,400' to 12,000' of moulding per hour.
- ③ **UP TO 2"x4" STOCK!**
Makes 42 of 46 standard moulding designs.
- ④ **QUICKER CHANGES!**
Easier, simpler to set up for every job.
- ⑤ **ONE-MAN OPERATION!**
Produces more output per day per man.
- ⑥ **PRECISION-BUILT!**
Simplified design, for long, heavy-duty service.
- ⑦ **PAYS FOR ITSELF!**
One job alone often pays for the moulder. Also uses waste stock!



Get the proof! Don't take our word for it! Write today for literature! Ask for complete convincing demonstration at your own shop—let us SHOW you how you can make money with an XL MOLDMATCHER. Write TODAY!

SMITHWAY MACHINE COMPANY

Manufacturers

4617 Airport Way

Seattle 8, Wash.

XL PRODUCTS COMPANY

National Distributors

4617 Airport Way

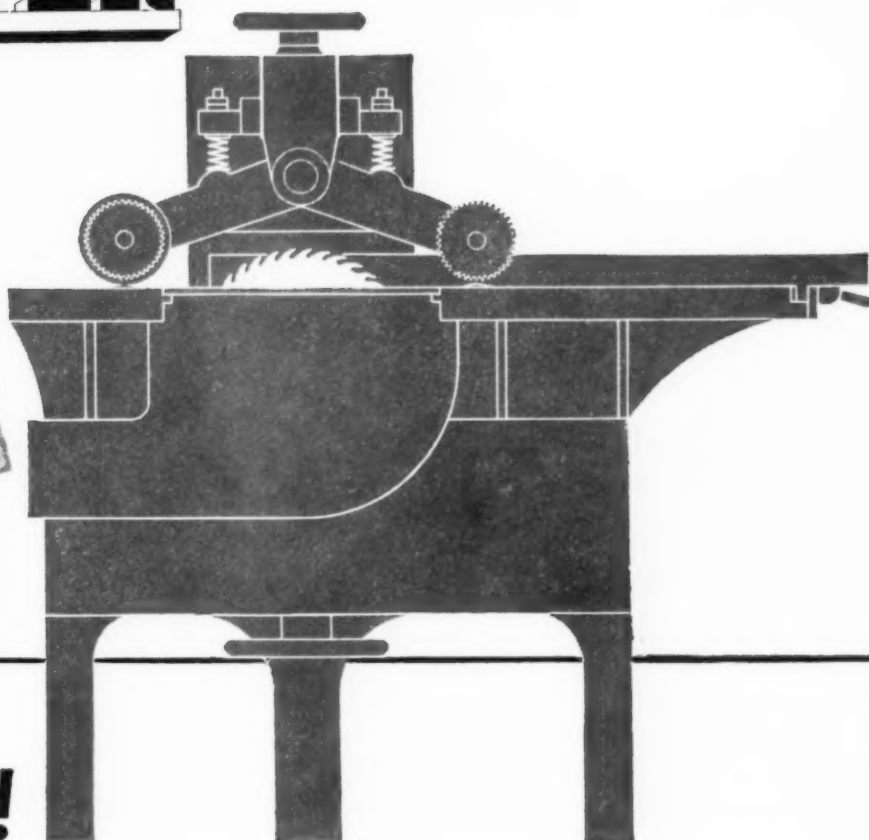
Seattle 8, Wash.

A NEW Self-Feed RIP SAW at Today's LOWEST PRICE!

IT'S THE GREAT NEW

XL RIPPER

**Out
Soon!**



Watch for it!

**Gives You the Features You Want
At the Price You Want to Pay!**

Announcing the XL RIPPER—a new, compactly designed self-feed rip saw taking up to 4" stock, with 15" ripping capacity . . . ready soon at a record-breaking low price. It's precision built for you by the makers of the tremendously successful XL Moldmatcher! Watch for the new XL Ripper. Before you buy any rip saw, SEE a demonstration of this great new woodworking tool. Write today for full information!

Manufactured by

SMITHWAY MACHINE COMPANY

4617 Airport Way

Seattle 8, Wash.

Better Homes

and Gardens

READ BY MORE THAN 3,000,000 FAMILIES

JUNE 1948 • 25¢



Here's What Better Homes & Gardens' 100% Service Means To You

BH&G has no fiction, no side lines. Cover to cover, ads and all, it's devoted 100% to service for better living. This means that the people who read BH&G don't do it casually. They're after something: ideas, information, trends. They get it. They come to you pre-informed about the ideas that you're trying to

put across. They come as informed clients — saving you much time and many headaches. Here's what we're telling them in June: 12 Big Ideas (how they work in small houses); How to Read a Set of Plans; Here's What I'll do about Building (interviews with Presidential prospects).

These brands are advertised in the JUNE issue of Better Homes & Gardens:

APPLIANCES

Amana Home Freezer
Apex Washer
Coolerator Refrigerator
Crosley Refrigerator
Filter Queen Vacuum
Florence Ranges
Frigidaire Refrigerator
G. E. Home Freezer
G. E. Electric Range
G. E. Refrigerator
G. E. Lamps
Gibson Refrigerator
Hoover Iron
Horton Ironer
Hotpoint Disposal
Hotpoint Refrigerator
International Harvester Home Freezer
KitchenAid Mixer
Knapp-Monarch Hot Plate
Knapp-Monarch Liquidizer
Knapp-Monarch Iron
Maytag Washer
Norge Home Freezer
Perfection Oil Range
Philco Home Freezer
Philco Refrigerator
Proctor Iron
Serval Refrigerator
Simplex Ironer
Sunbeam Ironmaster Iron
Swartzbaugh Rangette
Toastmaster Toaster
Universal Gas Range
Victor Quickfreeze Home Freezer
Voss Washer
Welbilt Gas Range
Westinghouse Waste-Away

ELECTRICAL & WIRING

Bell Electric Outlets
Bell Telephone System
Burgess Batteries
Onan Power Plants

HARDWARE

Dic-A-Doa Paint Brush Bath
Dow Saran Screen
Duco Cement
Gabco Automatic Window Screens
Invisible Sash Balance
Lowell Paint Spray
Lumite Screen
Plastic Wood
Smooth-On Cements
Speed Load Calking Gun
Yale Hardware

HEATING, MAJOR

American Radiator
Bryant
Crane
Dunham
Hydro-Fla
Iron Fireman
Janitrol
Petro
Stokol
Superflex
Williams Oil-O-Matic

HEATING, MISCELLANEOUS

Aerapel Fans
Dust-Stop Filters
Fan-Pac Attic Fans
Hancock Outdoor Fireplace
Heatilator Fireplace
ILG Ventilation
Price Outdoor Fireplace
Superior Fireplace
Ventilattic Fan

MILLWORK & LUMBER

American Central Kitchens
Crawford Doors
Curtis
Fenestra Steel Casements
Mengel Flush Doors
Modernfold Doors
National Oak Floors
ROW Windows
Red Cedar Shingle Bureau
West Coast Woods
Western Pines
Youngstown Kitchens by Mullins

PAINT & RELATED PRODUCTS

Albron
Cuprinol
Delaware Wall-Ever
Dutch Boy Blend
Eagle RTU White Lead
Flatlux
Glidden
Kyanize
Mura-Tex
NuEnamel
ParaStoneTex
Paratex
Pittsburgh
Selfast
Wonsover

PLUMBING

American-Standard
Briggs
Crane
Culligan Soft Water
Evans Hot Water
Hot-Roc Hot Water Tanks

PLUMBING (Cont'd)

Lustertone Sink Taps
Orangeburg Fibre Conduit
Permutit Soft Water
Rheem Hot Water
Roud Hot Water
Servisoft Soft Water
Smithway Hot Water
Toastmaster Hot Water
John Wood Hot Water

INSULATION

Carey
Celotex
Chamberlain
Flintkote
Insul-Cotton
Kinsul
Reynolds

ROOFING & SIDING

Barrett
Celotex
Flintkote
Kaiser
Reynolds
Temlock

MISCELLANEOUS

Dow Magnesium
Easi-Bild Patterns
Faries Medicine Cabinets
LOF Glass
Majestic Home Incinerators
Orlyt Greenhouse
Portland Cement
Pyrene Fire Extinguisher
Rock of Ages Monuments
Robertshaw-Fulton Heat Controls

MISCELLANEOUS(Cont'd)

Rusco Venetian Awnings
Setwell Pants Hangers
Spirilla Corset
Swaggerettes Gloves
Tex-Knit Ironing Board Cover
Warp's Venetian Blinds
Westclox Time
West Dodd Lightning Conductors
Zenith Hearing Aids

OUTDOOR

Champion Sprayer
Clean-Cut Lawn Mower
Clemson Lawn Mower
Dayton Irrigation
Dobbins Sprayer
Doo Klips
Gensco Saw
Hastings Soil Soaker
Hudson Sprayer
Hedgemaster
Jacobsen Lawn Mower
Jari Tractor
March Irrigation
MontaMower Lawn Mower
National Mower
Parker Lawn Sweeper
Pennsylvania Lawn Mower
Porter-Cable Hedge-trimmer
Reo Lawn Mower
Sensation Lawn Mower
Spartan Sprayer
Swan Rubber Hose
Tara Lawn Mower
True-Temper Tools
Weed-Wand
Whirlwind Lawn Mower
Wiss Pruners

CIRCULATION OVER 3,000,000

America's First Service Magazine

Amerock CABINET HARDWARE



Stratoline



Streamline



DeLuxe



Standard

● The very finest in styling and quality. Neo Die Cast with beautiful Polished Chromium finish. (Above: ED418 Door Pull, Actual size).

● Streamlined beauty at moderate cost. Neo Die Cast, Polished* Chromium finish, black embossed lines (Above: ED405 Door Pull, Actual size).

● For colorful kitchens. Polished Chromium over Brass, with plastic bases and color-embossed lines. (Above: EO8215 Door Pull, Actual size).

● Quality Cabinet Hardware at low cost. Beautiful new designs in Genuine Chromium Plated finish. (Above: E314 Door Pull, Actual size).



No. ED530 Knob



No. ED9408 Catch
Patent No. D140,765



No. ED531 Knob



No. ED9400 Catch
Pat. No. D126,551



No. E347 Knob



No. EO8760 Catch
Pat. No. D109,464



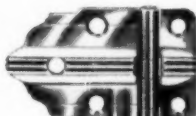
No. E345 Knob



No. E9414 Catch
Pat. No. D140,766



No. E3080 Flush Doors
No. E3082 1/2" Offset
Patent No. D140,763



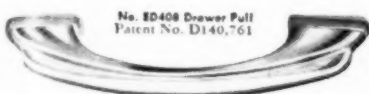
No. E3050 Flush Doors
No. E3052 1/2" Offset
Patent No. D126,556



No. E3067 Flush Doors
No. E3069 1/2" Offset



No. E3066 Flush Doors
No. E3068 1/2" Offset



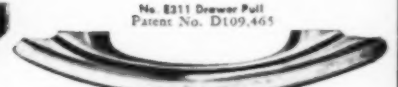
No. ED408 Drawer Pull
Patent No. D140,761



No. ED400 Drawer Pull



No. EO8260 Drawer Pull
Patent No. D109,464



No. E311 Drawer Pull
Patent No. D109,465

Precision winged latch bolt mechanism
Patent No. 2,233,278

*Precision winged latch bolt mechanism
Patent No. 2,233,278

*Precision winged latch bolt mechanism
Patent No. 2,233,278

*Precision winged latch bolt mechanism
Patent No. 2,233,278

All patterns now available through Amerock dealers and jobbers.



© 1948
AMEROCK CABINET HARDWARE CORP.
ROCKFORD, ILLINOIS

AMERICAN CABINET HARDWARE CORP., ROCKFORD, ILL., DEPT. 7-JN
Please send latest catalog on "Amerock" Cabinet Hardware to:

Name.....

Address.....

City.....State.....

My favorite Supplier is.....

NOW! FOR THE FIRST TIME

A Package BOILER for 100%
NON-FERROUS, Small Home
HEATING SYSTEMS.....

STURDY, RUST-FREE LIFETIME CONSTRUCTION

All parts in contact with water are copper, brass or bronze. The Heat Exchanger is lead-alloy coated for additional protection against the products of combustion. The perfect companion equipment for an all non-ferrous RUST-FREE heating system.

A REAL PERFORMER

Design eliminates excessive bulk in the heat transfer area. The low water content (8 pints) and Copper Finned Heat Exchanger and counter-flow principle provides instant response to heat demand—pickup load and standby loss are minimized. In a matter of seconds an abundance of hot water is silently speeded to all parts of the heating system... even distant points in sprawling, ranch type construction installations.

EXTREME EFFICIENCY

Costs less to operate. The patented Burkay Modulator Burner employs two stages of primary air entrainment plus an auxiliary secondary air supply which produces exceptional high combustion efficiency. NOISELESS Burner Operation. Flame ports are fully protected from clogging.

POSITIVE PROTECTION AND SAFETY

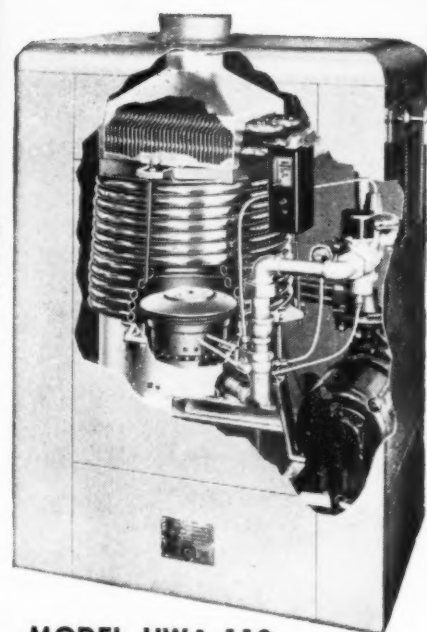
Carries the A.G.A. seal of approval. All controls, including the special pilot bracket assembly, are easily accessible.

BEAUTIFULLY STYLED • ATTRACTIVELY FINISHED

IN NEUTRAL GRAY HAMMERLOID.

The NEW Burkay

FORCED
CIRCULATION
GAS FIRED
BOILER



MODEL HWA-110
HOT WATER BOILER

Burkay's proven principle of design is backed by years of experience in serving the commercial and industrial fields with large volume water heating equipment. Long, trouble-free, dependable service is assured. Comes completely packaged, with all controls, ready to install. Installation is easy and costs less because of the minimum weight and compact size.

Small square model HWA-110... 110,000 B.T.U. maximum input
Large round model 620... 195,000 B.T.U. maximum input
Both models available for Liquefied Petroleum gas

THE BOILER OF WIDE APPEAL TO WHOLESALERS • CONTRACTORS • DEALERS • USERS



THE BURKAY COMPANY

1209 NORWOOD AVE., TOLEDO 7, OHIO.

WRITE BURKAY HEATING PRODUCTS DIVISION TODAY FOR LITERATURE AND PRICES.

TRENDS

BUILDING MATERIAL — EQUIPMENT — APPLIANCES

Residential Construction Costs Continue Upward

THE YEAR 1948 is off to a record-breaking volume of residential construction. Each month through March has shown a substantial increase in the number of starts reported by the Bureau of Labor Statistics. The March total of 67,000 new dwelling units brought the quarter to 164,000 starts as compared to 142,600 last year, an increase of 14 per cent.

As to other categories, commercial building is showing a small increase over last year; industrial building is declining; architectural building is up, and other types of building show a small increase over last year.

High costs have shown little or no inclination to decrease. The best available data on costs on comparable types of buildings over a long period of time is that compiled by Roy Wenzlick & Co. of St. Louis. Although St. Louis is now one of the highest building cost areas in the United States, the data is indicative of trends elsewhere. In 1913 the cost of a thirty-family reinforced concrete building in St. Louis was \$84,600. By 1925 the cost was \$160,700 or almost double. In 1932 the cost reached a low point of \$107,600. By 1941 the cost almost reached the 1925 level with \$160,400. By late 1946 the cost had risen to \$244,000, reached \$274,000 in 1947 and advanced to \$276,800, an all-time high, in February of this year. The cost is now \$116,000 in excess of the 1925 level when large numbers of apartment buildings were built.

As long as rent controls are operative, these high costs rule out the possibility of a large volume of apartment building. Last year only 9 per cent of new dwellings were provided in multi-family dwellings.

Cost of a house of six rooms of frame construction in St. Louis in 1913 without land was \$3,836. In 1920 the cost of the same house was doubled, selling at \$7,678. The buyer's strike of 1921 brought the cost down a thousand dollars to \$6,605, but by 1925 the price was up again to \$7,284. Then, with the building boom over, construction costs dropped year by year to \$6,208 in 1929 and to a new low of

\$4,480 in 1932. By 1935 costs had increased another thousand dollars to \$5,468. By 1940 another thousand dollars was added, making the cost \$6,551. In 1941 the cost jumped another thousand dollars to \$7,586 and remained at that level during 1942, 1943 and 1944—the catch being that you couldn't build one then.

With the end of the war, the cost jumped \$1,500 to \$9,404 in October 1945. By the end of 1946 it was up another thousand dollars to \$10,532. In October 1947 the cost had jumped \$2,500 to \$13,074. It was believed by many that costs had reached a peak in 1947, but this theory was disproved by the fact that costs jumped another \$800 to \$13,894 in April 1948.

The cost of constructing similar houses in other cities ranges from a low of \$10,578 (without central heating) in Miami, Fla., to \$14,497 in Pittsburgh, Pa.

Other cost of living items have increased almost as much as this standard house which represents an increase of 132 per cent over 1939. Food prices are 124 per cent, and clothing prices 85 per cent over 1939. Average weekly manufacturing wages are up 114 per cent over 1939.

Most hopeful means of cutting building costs would be a drop in the price of lumber and millwork,

which totaled \$3,870 in April 1948 for the standard house, according to the detailed cost break down in the accompanying table as compared with \$1,533 in 1939. A reduction of labor costs which totaled \$4,394 in 1948 would help. The labor cost alone is only \$1,500 less than the cost of the entire house in 1939. With increased building labor rates going into effect in June in many cities, there is little prospect for improvement.

Continued high volume of residential building for political reasons, if nothing else, is the objective of the administration which wants to see 1,000,000 new homes started this year and will channel materials to make it possible. On the other hand, mortgage lenders, institutions and individuals are becoming much less willing to risk their funds on home building when the present high prices of real estate, building materials, labor costs and consequent risk conditions are taken into account.

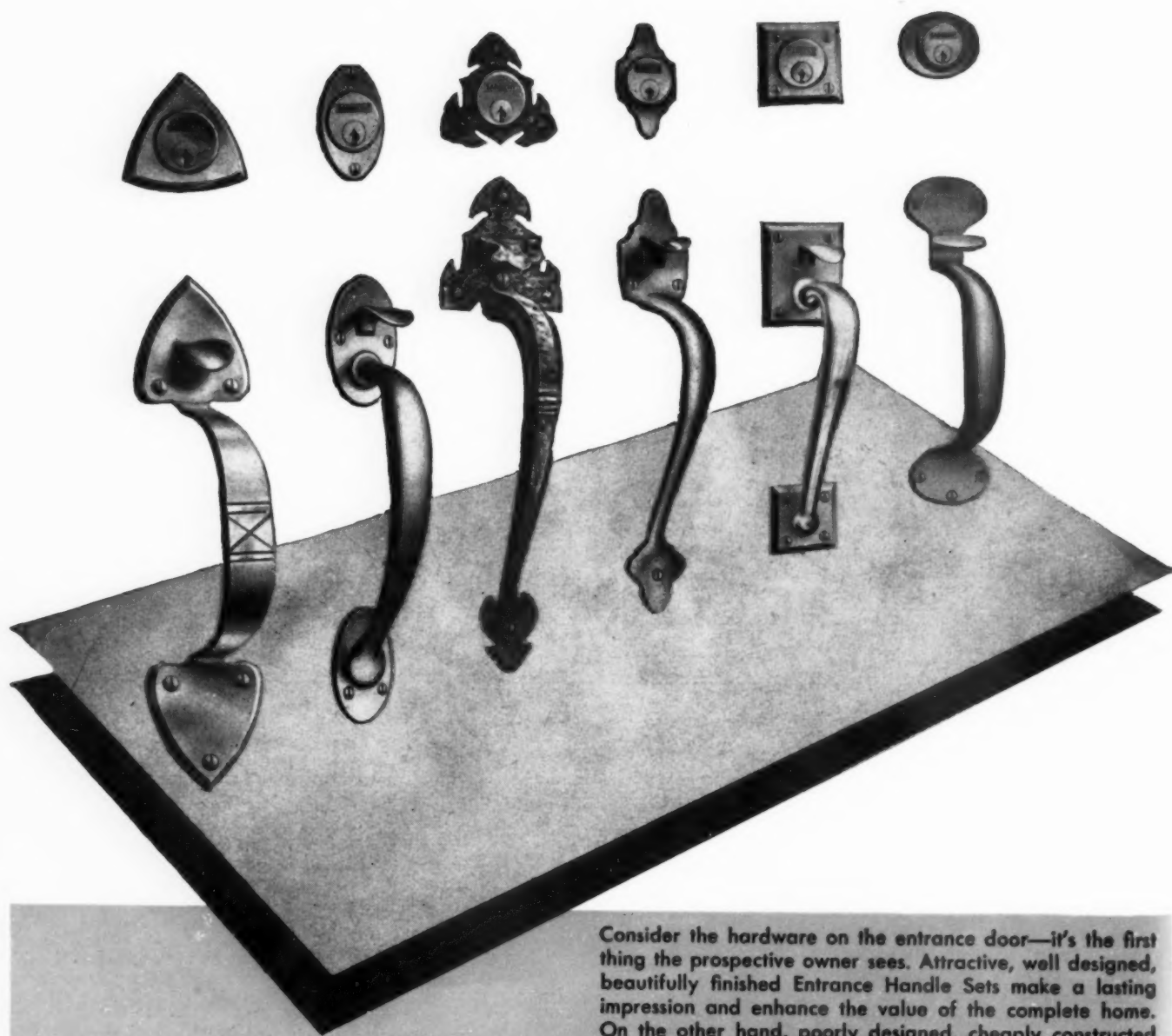
A 25 year government bond yields $2\frac{1}{2}$ per cent, AAA corporate bonds yield nearly 3 per cent, some high grade stocks slightly under 4 per cent and some high grade common stocks as much as 6 per cent. In contrast, insured home mortgages with maturities of 20 to 25 years and a gross rate of 4 per cent provide a net yield of a little over 3 per cent.

BUILDING COSTS OF A STANDARD SIX-ROOM FRAME HOUSE BUILT IN ST. LOUIS

	1939	1941	1945	1946	1947	1948	
Cost of Materials	1939	Oct.	Oct.	Oct.	Oct.	Jan.	April
(1) Masonry	\$ 513	\$ 514	\$ 603	\$ 644	\$ 709	\$ 729	\$ 735
(2) Tile Work	103	159	175	175	214	258	258
(3) Unfinished Lumber	360	544	695	723	986	1,045	1,045
(4) Finished Lumber	660	861	1,117	1,134	1,668	1,706	1,713
(5) Millwork	513	689	702	837	1,087	1,107	1,112
(6) Heating	239	262	273	330	409	456	504
(7) Plumbing	277	289	320	383	432	457	501
(8) Sheet Metal	49	106	56	59	114	145	117
(9) Electric Work	27	34	50	70	76	73	76
(10) Nails & Hardware	64	80	79	81	134	139	139
(11) Painting	29	35	38	43	173	173	197
(12) Misc. Metal & Wood	192	227	246	253	315	340	357
Lath Cover Bead Insulation							
Total Material Cost.....	3,026	3,800	4,354	4,732	6,317	6,628	6,754
Labor Cost (on site).....	1,696	2,279	3,177	3,685	4,178	4,394	4,394
Overhead-Profit of							
Subcontractors	344	433	515	586	701	745	757
General Contractors' Profit	505	650	805	900	1,120	1,177	1,191
Sales Taxes, Insurance,							
Bond	323	424	553	629	758	796	798
Total Cost	\$5,894	\$7,586	\$9,404	\$10,362	\$13,074	\$13,740	\$13,894

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Entrance Door Handles



Consider the hardware on the entrance door—it's the first thing the prospective owner sees. Attractive, well designed, beautifully finished Entrance Handle Sets make a lasting impression and enhance the value of the complete home. On the other hand, poorly designed, cheaply constructed entrance hardware builds up an impression of slipshod construction throughout the house. Don't take chances! Specify Sargent quality products! If it's Entrance Handle Sets you want, illustrated are the most popular models. Note the dignified beauty of the designs. They are made from lasting materials and guaranteed to function with precision. Furnished in a choice of attractive finishes. For profit and prestige, always specify Sargent quality products.

SARGENT & COMPANY
NEW HAVEN, CONN.

NEW YORK

CHICAGO

News, Views and Comments

On and Off the Record

PUBLIC RELATIONS—N A H B, asking for co-operation from all segments of the home building industry, has set the week of Sept. 5 as National Home Week. Purpose is to demonstrate homes of all kinds in every community in the land.

PLANS—Detailed suggestions for procedure, publicity and follow-up for National Home Week for communities of all sizes were to be drafted at spring meeting of NAHB directors and executive committee. Full report will appear in July issue of *American Builder*.

JUVENILE DELINQUENCY—Characteristically, the public housers seize this important contemporary issue as another avenue of attack on the building industry. Apparently, none of them wants to admit that juvenile and adult delinquency are the greatest causes of substandard housing, while substandard housing has very little to do with delinquency of any kind.

DELINQUENTS—They dress, eat, work, play with characteristic lack of responsibility. That attitude reflects itself in what they do to their houses and the furniture in them. The cure for delinquency is not a change of environment, it is a change of attitude.

PHILADELPHIA—Judge N. S. Winnet, Chairman of the Crime Prevention Association, recently said, "the primary cause of delinquency and crime among youth is substandard housing . . . I know of no better crime prevention program for this year than to urge immediate public, low-cost housing." As we see it, the judge recommends the best possible way to increase the conditions he decries. What Philadelphia and every other city with mounting juvenile delinquency rates needs, is a liberal dose of parent education in the virtues of honesty and hard work.

STATISTICS—The judge used figures that show higher rates of juvenile delinquency where the housing standards are lowest. He might have used diet, clothing, church and school attendance and other standards, and got the same result. None of them, including the housing standards, would prove that juvenile delinquency is the result and not the cause of any

or all of the others. It's time for a real objective study of cause and effect.

SENATOR CAIN—He introduced an amendment to S. 866 calling for deletion of public housing section from the bill. It was the one that lost, 49 to 35. Had it passed, it might have opened the way for Senate consideration of the Wolcott bill, H.R. 5854.

NEW HOUSING—"Who Can Afford New Housing?" is the title of a pamphlet recently issued by The Construction Information Committee, 815 Fifteenth St., Washington 6, D.C. Contains facts that thoroughly debunk the sweeping generalities made publicly by public housers.

NATHAN MANILOW—The vigorous and logical president of Chicago Metropolitan Home Builders Association recently took part in two radio debates with a Chicago public housing official opposing him, and an alderman in the middle. All honors went to Manilow whose facts and logic made the public housing argument sound very feeble.

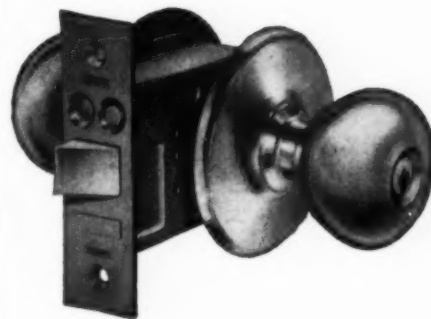
NATIONAL FARMERS UNION—According to the Denver Post, the union has 150,000 member families. It is cooperative, thus tax free. Now seeks alliance with labor unions to establish insurance, manufacturing and retail chains. With taxes reduced and government costs rising, just how much of American business does Congress think can be converted to a tax-free basis?

BERL E. GODFREY—He asks in the Dallas Morning News, "When federal government takes money from taxpayers' pockets and lends it to co-operatives at one per cent interest, while private business has to pay a much higher rate, is that fair? Is it fair to exempt the co-ops from anti-trust laws and SEC regulations that apply to private business? Is it equitable to leave the co-ops virtually free from taxation, putting the whole burden on the backs of private businesses with which they compete?"

RUINATION—It is not only unfair, it threatens to ruin the entire economy. It is about time for Congress to wake up to what is happening.

Integra Lock

Speaking of Entrance Door Lock Sets, as we do on the facing page, don't overlook the Integralock*.



Made with a round rosette to harmonize with small home architecture, the Sargent Integralock* (AR Design) is a precision made lock of the highest quality. It is also made with a square escutcheon plate (MR Design) which, while used extensively on office and large residential buildings, is also admirably styled for home use. The working parts, made from forgings, extrusions and stampings, are fully interchangeable allowing for a factory assembled lock case—a sealed lock case. Small and compact, it's extremely easy to install without weakening the door structure, yet once installed, it cannot fail to function with snap and precision. Moderately priced, it has beauty, safety and ease of operation—all combining for continuing customer satisfaction.

*Trade Mark



For nearly a century, manufacturers of quality builders hardware for homes, residential properties and all other types of buildings.

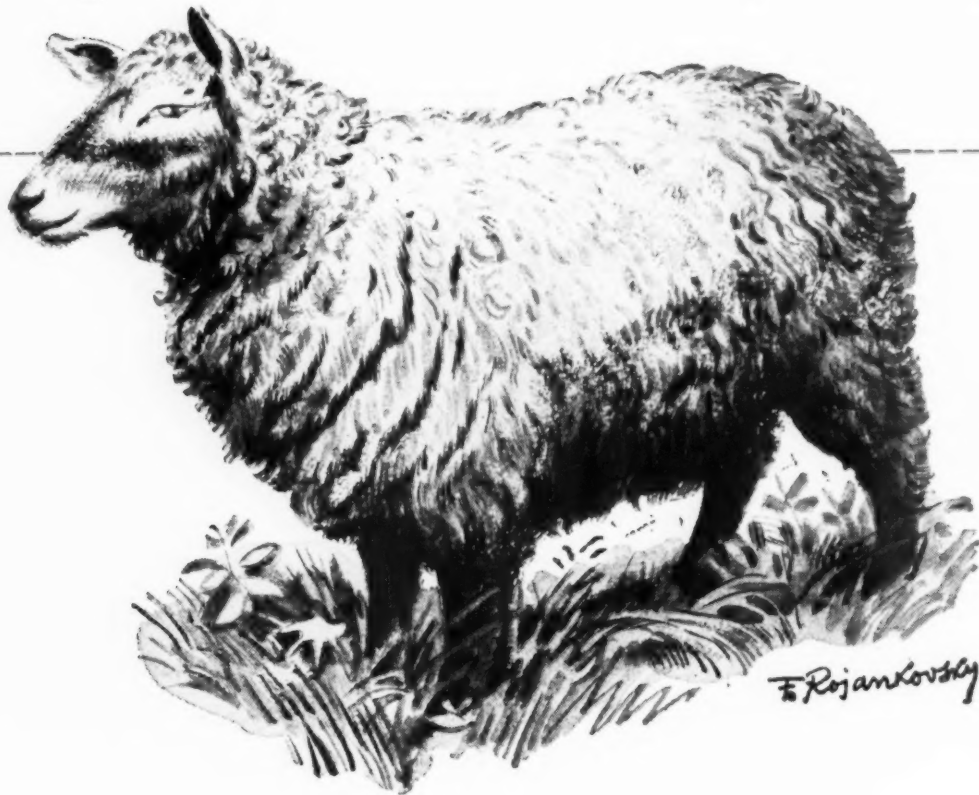
SARGENT & COMPANY

NEW HAVEN, CONN.

NEW YORK

CHICAGO

*don't let
competition
pull the wool over your eyes!*



Why let competitors get the jump on you—when it's so easy to give home buyers what they want? Today the trend is to Electric Ranges. Another million American families switched to Electric Cooking last year. Conservative estimates indicate that this year at least a million more Electric Ranges will be installed.

This is a definite trend that cannot be ignored. Progressive builders recognize this trend. Electricity is a "must" in any house, and it's simple and economical to include wiring for an Electric Range leading to a range outlet in the kitchen at the time of construction. This is assurance that the houses you build are not only modern today, but will stay modern for years to come!

Electric Range Section
NATIONAL ELECTRICAL
MANUFACTURERS ASSOCIATION
155 E. 44th Street
New York 17, N. Y.

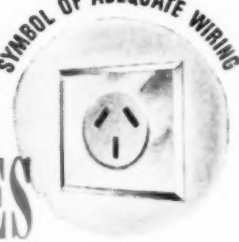
A-B STOVES
ADMIRAL • CROSLEY
ESTATE HEATROLA
FRIGIDAIRE
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GIBSON • HOTPOINT
KELVINATOR • LEDO
MONARCH • NORGE
QUALITY • UNIVERSAL
WESTINGHOUSE



*Follow
the trend...*

WIRE YOUR HOUSES
FOR ELECTRIC RANGES

SYMBOL OF ADEQUATE WIRING



LETTERS

Yes, it was an error!

To the Editor: It is not uncommon in this industry to encounter troublesome and frequently ludicrous errors in house plans but I found my efforts to reconcile the floor plan with the house on page 103 of the May issue like trying to dig a basement in a pool of quicksand. I also encountered the same situation when I turned to page 111. The two plans are obviously transposed—the one on page 103 is for the house on page 111 and vice versa.

No doubt you have already discovered your error. I also feel that many of your readers have spent hundreds of collective hours of study and eyebrow raising in an effort to discover what goes where in each of the two plans. *American Builder's* reputation for accuracy would naturally lead them to wonder. If they all read each issue as carefully as I, they have undoubtedly solved the problem, but I suggest that you call the attention of your subscribers to the errors so they will not spend any more time wondering about these inconsistencies.—J. C. LIPQRE, St. Louis, Mo.

Ed. Note: You and many others of our readers are correct. The plan on page 103 is for the house on page 111 and the plan on page 111 is for the house on page 103. The plans were transposed between the time the page layouts left this office and the printed magazines appeared. Although editors do make mistakes, and good ones, they cannot be charged on this one.

No second mortgage

To the Editor: The Federal Housing Administration has called our attention to a statement which appears in an article on our operations in your March issue. The statement is as follows:

"The company took back a second mortgage for the difference between \$6,700 and \$7,825, minus the down payment, when necessary."

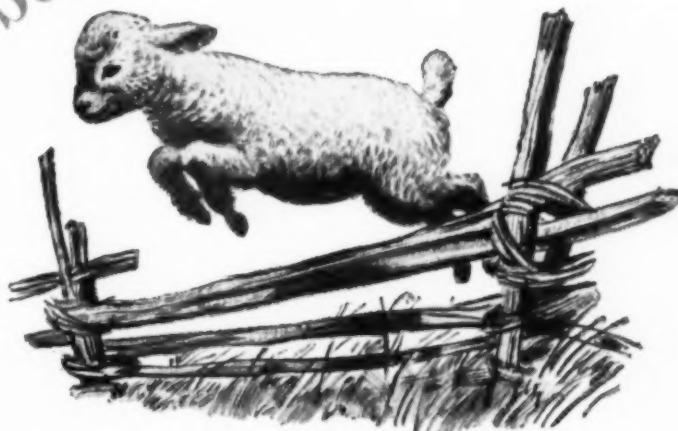
In the instances where our Corporation finds it necessary to sell on a delayed equity basis, we sell under an Agreement for Sale, holding title to the property involved in the name of our Corporation until such time as the delayed equity has been satisfied, as stated in the above-mentioned article.

The article as written by Mr. W. C. Radd was forwarded to us for proof-reading, and in reading it, we did not notice this error until it was drawn to our attention.

We regret this occurrence and trust that the above explanation will clarify any misunderstanding.—DON WILSON, vice president, Milton Kauffman, Inc.

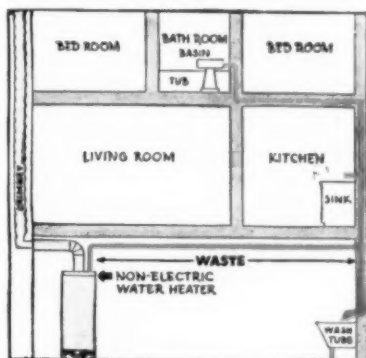
(Continued to page 56)

Something to Count on!



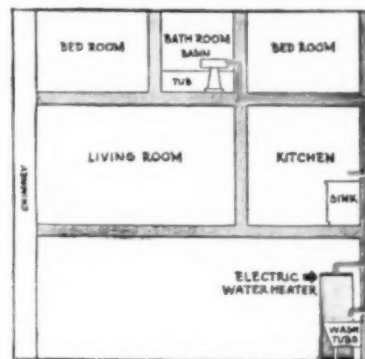
You needn't lie awake nights counting sheep. You can count on the fact that home buyers prefer automatic Electric Water Heaters. To have them completely satisfied with the homes you build—both now and in years to come—install the kind of water heating equipment your customers want.

How to reduce construction costs and add customer features...



NON-ELECTRIC INSTALLATION

Construction costs can be reduced with Electric Water Heaters because there's no flue or vent, so installation can be made anywhere—in a closet, in the kitchen, in the bathroom, in the utility room. Hot water lines can be short, cutting piping cost. Customers like Electric Water Heaters



ELECTRIC INSTALLATION

because they are: (1) **AUTOMATIC** (continuous hot water, no attention); (2) **CLEAN** (smokeless, sootless); (3) **DEPENDABLE AND TROUBLE-FREE** (as electric light); (4) **ECONOMICAL** (fully insulated storage, short hot water lines); (5) **SAFE** (all-electric dependable temperature control); (6) **FLEXIBLE** (can be installed anywhere, even in living quarters; no flue or vent).

Electric Water Heater Section NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
155 East 44th Street, New York 17, N. Y.

B & F • BRYANT • CLARK • FOWLER • FRIGIDAIRE • GENERAL ELECTRIC • HOTPOINT •
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IT'S EASY TO
INSTALL an

electric WATER HEATER!

... in a house wired for an Electric Range!



ZUT... CUT!
and it's
AMERICAN SAW

with an

Speedy...


Easy Handling


in Any Position


A

AMERICAN
PORTABLE TOOLS

THE AMERICAN FLOOR SURFACING MACHINE CO.
511 So. St. Clair St., Toledo 3, Ohio.
Please send latest catalog and price on the American Power Saw. No obligation.

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Street

City.....State.....

You'll do the job 10 times faster than hand sawing—with an AMERICAN Power Saw! It's a time-saver on any cut... easy one-hand operation... ideal for construction, maintenance and repair work. Use it to cut wood, metal, stone, tile, composition.

Starts smoothly—no jerk or jar. Develops 1½ H.P. Blade speed 6500 R.P.M. Maintains cutting efficiency in all types of conditions. Exclusive elevating mechanism for accurate depth-of-cut adjustment. Telescoping guard. Will cut a 2" plank at 45° or 2 7/8" straight cut. American-built dependability. Send coupon for details.

LETTERS

(Continued from page 55)

Marker for steps

To the Editor: The entrance floor level of one of our local churches was originally above street level, but changes in town grades brought the pavement up to floor level.

Twenty years ago, I remodeled and renovated the building. In order to overcome the disadvantages of the same street and floor level, I raised the floor level of the new entrance vestibule 8 inches above the pavement. This level was carried inside and past the stairways. This made one step down from three sides of the vestibule.

Can you suggest any means of marking or identifying this step by paint or otherwise, so that anyone approaching the step would not mistake it, and accidentally make a misstep in passing from the entrance down to the main floor level?—N. P. WALTERS, Centreville, Md.

Time to count noses

(The following is taken from a letter addressed to Congressman John W. Gwynne, third Iowa District.)

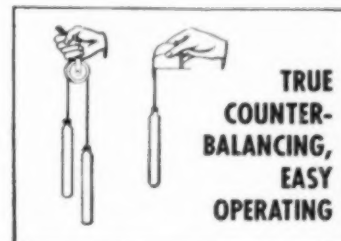
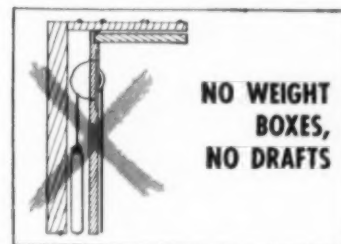
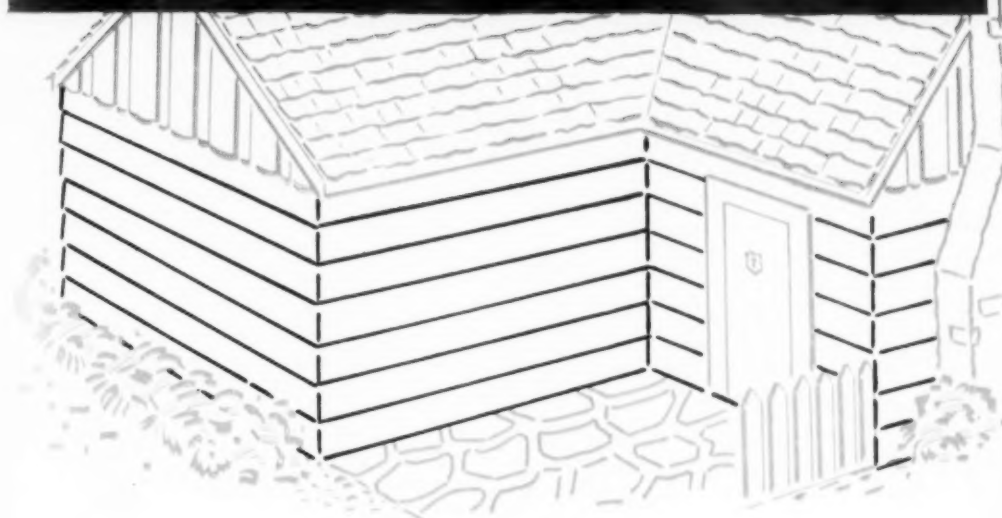
"This bill (S. 866) is up for committee hearing in the house very soon. We hope you will use your influence to force this bill out on the floor of the House, and then force a vote with a record of every Congressman's vote.

"It was passed in the Senate by a voice vote, because the majority of the Senators were afraid to go on the record. We believe Congressmen are made of sterner stuff, but if not, we want them forced to put their names on the dotted line.

"The decision this nation has to make right now before the next election is between free enterprise and socialism. Are we going to oppose Communism in this country as a strong, dynamic, solvent nation united under the free enterprise system? Or are we going to become a weak, socialistic country, staggering under increasing federal debt, burdened with unbearable federal taxes, and torn by internal strife? Let the present Congress decide right now, before the next election. Force the Congressmen out into the open by a recorded vote on the T-E-W bill. Then force a recorded vote on the socialized medicine bill and the federal aid for schools bill. Let's get a roll call vote on all of them right now before part of the Senators and all the Congressmen come up for reelection this fall.

"I, for one, am sick and tired of the cheap, panty-waist, something-for-
(Continued to page 58)

WHAT! . . . A HOUSE WITH NO WINDOWS?



A house without windows would be fine for builders. It would save them time, labor and money. But even *with* windows you can save on building costs and on labor by buying pre-assembled, ready-to-install window units.

You can save *additional* time and money and add to owner satisfaction if these pre-assembled windows are equipped with Pullman Sash Balances. Pullman balances eliminate the need for weight boxes . . . make possible wider window areas . . . allow the use of narrow, modern trim, or no trim at all.

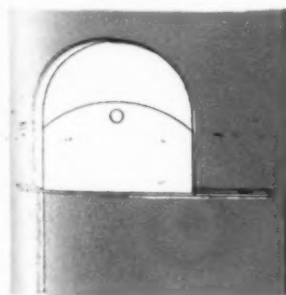
Owners are pleased with the ease with which the windows raise and lower.

They can feel for themselves the perfect balance between the spring tension and the sash. They don't have to lift the weight of the window against friction. They will also like its appearance. Owners want windows which are draftless—perfectly weather tight. They want windows where insulation can be butted up to the window frame. With Pullman-balanced windows you give owners the construction they want at no extra cost to you.

That isn't all! Pullman balances give you an exclusive sales advantage. They are guaranteed for the life of the building. No cords to break. No weights to fall. Complete owner satisfaction.

Ask your dealer for Pullman-balanced pre-assembled window units.

Or for information write Pullman Manufacturing Corporation,
325 Hollenbeck Street, Rochester 5, N. Y.



Specify Window Units with
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WROUGHT STEEL STRAP HINGES



TEE HINGES

*Quality
Hardware
Since 1865*

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MANUFACTURING COMPANY

PITTSBURGH 12, PENNSYLVANIA



LETTERS

(Continued from page 56)

nothing brand of politics we have had in Congress under the New Deal and for the last two sessions under a Republican majority. Let's face the issue, and force a show-down at once. I know of no better way than to get a recorded vote on all three of these socialistic bills.—J. H. CHAPMAN, C. W. Chapman Lumber Co., Waterloo, Iowa.

House plans

To the Editor:—I would like to make a suggestion in reference to the blue prints usually in the middle of the magazine. The plans, elevations and sections consist almost entirely of modern or rambling houses. While the trend is modern today, there are many who like Colonial, or especially Cape Cod. I suggest that the blue prints vary, using modern, Colonial and Cape Cod alternately.—ALBERT L. BROWN, 1422 Potomac Ave., S.E., Washington 3, D.C.

Anniversary Coming Up

To the Editor: I am renewing my subscription. If I live to receive the issue of December, 1950, it will be 30 years continuous, as I subscribed to *American Builder* in 1920. Have missed only one copy.—ALVA A. SMITH, Fayette, Ohio.

Commends Article

To the Editor: We have received copies of the issue with the article on houses designed by us for Dean Wainwright Co. This is an excellent presentation of this project, and we appreciate being credited with planning same.—HUGH MARTIN, Miller, Martin & Lewis, Architects and Engineers, Birmingham, Ala.

German impression

To the Editor: Yesterday I received your package with copies of recent issues of *American Builder*.

I have been very much surprised about the enormous progress of the American builder and home building. Perhaps you will wonder why I have such an amazing interest, especially in American home building. It is because I intend to immigrate to the United States. My grandfather lost his property to the bolsheviks after World War I, and my father lost all of his property after World War II. I don't intend to lose my life work, too. I presume the *American Builder* is showing me the right way to do things. — SIEGFRIED FORSTREUTER, 24 Bielefeld, Markische Str., 24, British Zone, Germany.

Savings for You ... SKIL Saw!



SKIL Saw

Handles Easier Anywhere ...

Saves Time ... Cuts Materials of All Kinds ... Cuts Costs



With a change of blades or abrasive disc, SKIL Saw cuts or scores concrete blocks, marble, tile, terra cotta, sheet steel, corrugated roofing, Transite, plate glass, compositions and many other materials ... all with savings in time, labor and money.

No saw works faster, handles easier, cuts more kinds of materials than SKIL Saw. It's SKIL Saw every time for quicker cuts where savings count ... from foundation forms to roof. And SKIL Saw's superior construction keeps SKIL Saw on the job longer for trouble-free, economical operation. See your SKIL Tool Distributor today about a demonstration on your own work.

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Your customers want these **ELJER** features!

Features of Enameled Cast Iron Bathtubs

Thick vitreous enamel, fused to rugged, rigid cast iron, creates a permanent, satin-smooth finish. The wide, front-rim seat is only 16 inches high . . . easy to step in and out. Tub interior is full size to permit a luxurious, reclining bath. Bottom is flat . . . for safety's sake. End seat is ideal for bathing children, foot bathing or a sitting shower.

Features of Real Vitreous China Lavatories

Sparkling, glass-like finish, fired at 2200° F., becomes an integral part of the clay base. Resists stains and the effects of all ordinary acids. Overflow outlets concealed under front, anti-splash rim. Generous shelf space. Eljer's quality faucets turn off and on with a touch of the finger and all wearing parts are easily renewable.

Features of Eljer Water Closets

Integral china overflow and ground-in valve seat eliminate

metal tubes that invite corrosion. Ball cock adjustable to variations in water pressure. Full size, syphonic, jet-action bowl with "Elvortex" whirlpool jet . . . quiet action and positive flush.

Matching Design

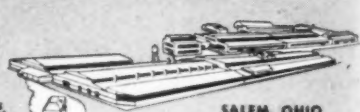
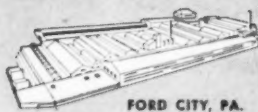
Eljer's complete line includes a wide variety of related, yet distinctive styles, to meet the most discriminating requirements . . . in bathroom, powder room, laundry or kitchen. All designs match harmoniously to create beautiful ensembles.

Matching Color

Eljer Fixtures are furnished in four beautiful pastel shades as well as white . . . and the lustrous finish of Eljer's Vitreous China or Enameled Cast Iron Fixtures is easy to keep clean and new looking.

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PLUMBING FIXTURES ARE OUR EXCLUSIVE BUSINESS—17 ACRES OF IT!



MANUFACTURERS OF FINE PLUMBING FIXTURES SINCE 1904



MONTHLY REVIEW

NEWS OF THE NATIONAL ASSOCIATION OF HOME BUILDERS AND AFFILIATED ASSOCIATIONS

Second Annual Chicagoland Home Show Features Many Educational Displays



HUGE THROGS visit Chicago Coliseum to view vast array of new products and services for the home. Visitors learn practical ideas for better living

Despite unseasonal cold and rain, the Chicagoland Home Show of 1948, sponsored by the Chicago Metropolitan Home Builders Association, was attended by over 100,000 persons. More important than the total attendance figure, and of prime importance to the exhibitors, was the type of visitors. In a spot check of 500 persons who stopped at his booth, one exhibitor reported 95 per cent were either home owners or prospective owners.

The show was held at the Chicago Coliseum May 1 through May 9. Paul S. Van Auken, managing director for the Chicago Home Builders Association, was in charge. Displays filled over 150 exhibit spaces and offered an array of products, services and ideas comparable to those at the annual NAHB Convention. Exhibitors totaled 100.

The outstanding feature of the show was its completeness. Everything pertaining to the home—from planning to financing to construction to furnishing—was covered. The objective was to help the average householder understand what actually goes into a home and what features should be stressed.

Chief attraction was the full size Industry Engineered House built by The Edward Hines Lumber Co. of Chicago. The first house in the Chicago area to be built in accordance with engineered housing principles, it drew considerable interest from Chicago's leading newspapers as well as from the spectators. The house was constructed with cutaway sections to give prospective home owners an opportunity to study construction detail.

The Builder Association's own ex-

hibit the "Home Seekers Supermart" was the number two feature in point of public interest. Current building projects of members were described and illustrated on panels, and literature distributed. According to Martin C. Huggett, executive vice president, inquiries were so numerous that literature expected to last the duration of the show was exhausted in two days, and additional personnel was required

to handle the crowds. A special clinic service offering information on planning, financing, building, and equipping a house was swamped with requests for counsel.

Innovations which created considerable public interest were audience participation broadcasts from the Coliseum; a bricklaying contest held each day among apprentice bricklayers, and an exhibit of miniature scale models of the Engineered House, built by competing teams of boys from craft shops of Chicago Parks.

NAHB Officers and Directors Rally to Defeat T-E-W Bill

When Congressional discussion of the T-E-W Bill and other housing legislation was at its hottest in Washington, early in May, officers and Directors of NAHB, spearheaded by President Milt Brock, called personally on their representatives in Congress to urge defeat of the bill and passage of the Wolcott Bill as a substitute. Nearly 200 builders, representing far more than that number over the country, were in the nation's capital for a national association meeting, and took advantage of the fact to voice their opinions of the highly controversial legislation.

Durbin Heads New Michigan Association



OFFICERS of the Michigan Home Builders Association: left to right, Ward H. Blackall, vice president; Keith Hicks, secretary; Harry J. Durbin, president; Nathan E. Haskill, treasurer. Other vice presidents, not pictured, are Gerald Healey, W. H. Guinan, George Duke, Jr., and Peter Leenaars

The newly formed Michigan Association of Home Builders at its recent organization meeting elected Harry J. Durbin, Detroit, as president. Keith Hicks of Lansing is secretary, and Nathan E. Haskill, also of Lansing, is treasurer.

There are five vice presidents, each of whom is chairman of a major committee, as follows: Gerald Healey, Flint,

legislative; William Guinan, Detroit, mortgage finance; George Duke, Jr., Detroit, veterans' affairs; Ward H. Blackall, Grand Rapids, membership; and Peter Leenaars, Battle Creek, public relations.

Howard C. Walsh served as temporary chairman of the association. Headquarters will be in Lansing.



Cortright's Column

By Frank W. Cortright

Executive Vice President, National Association of Home Builders of the United States

"NATIONAL HOME WEEK" sponsored in every city throughout the country by Home Builders Associations begins September 5th, 1948.

For the first time in the history of this industry, builders will at one time show the home-buying public what they are building and how they build it. In cooperation with newspapers, stores, dealers, bankers, realtors and labor, they will drive into the public consciousness the full magnitude of their operations, the quantity and the quality of their product.

No reputable, wide-awake home builder can afford to miss this opportunity for cooperative, educational activity benefitting both home seekers and the industry.

Certainly, the desire of Americans to have a home of their own is a deep one. At the end of last year, the percentage of owner-occupied homes had risen to 55, with the tenant-occupied homes down to 45 per cent. This direct reversal of previous proportions underlines that deep desire; our story of new homes completed and under construction will strengthen it.

"NATIONAL HOME WEEK" will demonstrate to the public that the home builders of America build attractive, sound, livable homes. Builders will provide the visible proof—from the digging of the foundations and the laying of the footings, to the raising of the ridge pole and the completion of the home.

"NATIONAL HOME WEEK," will demonstrate that the gyp, fly-by-night builder has no place in our system—that builders build for their community and nation, as well as for hard-earned profits—that they are men of ability and integrity—with a stake in their community.

Builders know by now the purpose of **"NATIONAL HOME WEEK"**—that the program for the week is under the sponsorship of the National Association of Home Builders in cooperation with other interested groups. Homes will be on display. Projects will be on display. Some will be in various stages of construction. Others will be completed. Some will be furnished; others will be unfurnished.

I cannot urge you too strongly to participate to the full in this activity. All segments of the building industry, and all those related and interested in it, have a golden opportunity.

Call the executive officer of your local Home Builders Association as to what you should do, how you can capitalize on this important project. *If there is no builders' group in your town, write to us for an instruction kit.* This outlines the method to be followed in contacting your local newspapers, radio stations, stores and civic groups, realtors, lumber dealers, bankers and city officials. With their help you can be sure of a successful HOME WEEK in your community.

The home building industry of America was the first to regain its full stride following World War II. Home builders have completed more than a million and a half new homes during 1946 and 1947. They are meeting the problem of a disruptive housing shortage. They have cooperated with every division of government and with other segments of the industry. The NAHB National Home Week will show how this was done—and what the splendid end-results are.

Millions of veterans, men, women, and children have been housed in new, well-built, livable, safe, attractive, decent homes. This is preserving our way of life; is producing a vigorous nation of home owners.

"NATIONAL HOME WEEK" will prove to the public that home builders have quickly grasped and adopted skilled methods, new materials and techniques, and have been fast in the utilization of modern tools and equipment. This September and every September from now on we will prove what we can do—we will sell a full appreciation of home ownership and the American way of life.

Dallas Forms Veterans' Panel To Probe Building Complaints

The Dallas Home Builders Association took the initiative in forming a veterans' panel in Dallas to investigate complaints of faulty construction. The panel was formed by Angus Wynne, a builder and veteran, who was named by the builders association to head a committee charged with working out a solution to the veterans' complaint problem. Mr. Wynne has invited representatives from all Dallas veterans' organizations to sit on the panel, along with FHA representatives and those from the home builders association.

Mahoning Valley Chapter Stages New Home Show

At Youngstown, Ohio, the Home Builders Association of Mahoning Valley staged the first home show to be held in that area in seven years. Participating in the opening were Jack



ED GENSLER, left, chairman of Mahoning Valley builders' home show watches Mayor Charles Henderson of Youngstown opening the show

Heath, president of the association; E. H. Gensler, vice president and show chairman; Chris Bode, Jr., treasurer, and C. E. McGranahan, executive secretary. E. W. Stease was director of the show. It is hoped the Mahoning Valley show will become an annual event.

Seattle's Building Labor Agrees to Waive Wage Boost

Setting an example that might well be followed in other parts of the country, the Buildings Trades Council in Seattle has agreed to waive a 6½ cent wage raise which would have gone into effect July 1. The wage raise is provided under a six-month cost of living adjustment in its contract, the Seattle Master Builders Association reports. The association expects substantial savings in costs to builders and home buyers from the move.

Breakfast meetings of the trustees and advisory committees of the association have been so successful that the breakfast meeting idea has been extended to the whole chapter. The initial meeting was on FHA financing.

Washburn New Secretary Of Maine Association

The Home Builders Association of Maine recently named Howard R. Washburn as its executive secretary. Mr. Washburn is an educator by profes-



HOWARD WASHBURN

sion, and has had considerable editorial experience in the home building field. He published a "Home Builders' Manual" in Portland. As part of his duties as secretary, Mr. Washburn edits an association monthly, the "Maine Home Builder."

San Francisco Home Show Is an Outstanding Success

With only preliminary reports on attendance available, officials in charge of the first annual San Francisco Home Show declared it an outstanding success. Visitors, streaming through it during the eight days of the show, were in greater number than the most optimistic expectations. The crowd was especially interested in the many educational displays. Exhibitors at this year's show are already making plans for next year's show, and some reservations already have been received.

Toledo Panel Sees Home Market Collapsing if Wages Go Higher



A PANEL discussion on the stabilization of labor costs in Toledo recently arrived at the conclusion that another round of wage increases will price homes out of the market. Men on the panel included Harold Sturdevant, Paul Fuller and Raymond Pyle of Toledo; Rodney Lockwood, Harold Durbin and Earl Doyle of Detroit; Norm Watkins and Bill Tobin from NAHB in Washington. At the left in the picture is Dale Mehring, Toledo association president, and in order to the right are Pyle, Doyle, Tobin, Sturdevant, Watkins and Durbin

Hartford County Home Show Draws Record Attendance of 25,000



A STEADY stream of visitors passed through the model home erected at the recent home show held by the Home Builders Association of Hartford County

A record crowd of 25,000 persons visited the home show held in West Hartford, Conn., recently by the Hartford County Home Builders Association. Interest was high in a model home, erected inside the armory exhibit hall by the association members. The Hartford Times, the local newspaper, was co-sponsor of the show.

The design of the small model home was worked out by the Hartford Society of Architects. It is a basementless plan, and the model featured a utility room containing the heating unit, a hot water heater and storage space near the kitchen.

The modern kitchen featured a built-in automatic washer, as well as cupboards, range and refrigerator. The bath was finished in glazed tile. Although of small dimension, 33x22 with a 10x11 foot ell, the house has three bedrooms.

Meet Frank Nerone, New Executive in Pittsburgh

Frank Nerone, new executive director of the Pittsburgh Home Builders Association, has a good background of experience in fields close to building. He has served as executive secretary of the Pittsburgh City Planning Commission,



FRANK NERONE

as assessor for the Board of Assessment and Review of Taxes and as Appraiser and Inquisitor for the Board of Inquisition for the Orphans' Court.

Portland Breaks Ground For Blandings' Dream House

The Portland Home Builders Association is one of the groups erecting a "Blandings Dream House" to cash in on the publicity surrounding the release of the motion picture, "Mr. Blandings Builds His Dream House." The movie is to be generally released early in July, and the association hopes to have the home on exhibition when it is released in Portland. Speakers at the groundbreaking ceremonies included Oregon's Gov. Hall, Herman Schmitt, president of the Portland association, Edwin Sandberg, regional NAHB vice president.

Long Island Chapter Designs New Insignia

The Long Island Home Builders Association has designed new insignia combining the national association eagle with the name of the local chapter. It was created for a membership drive.

The association also has opened an extensive "Library of Homes" exhibit at the Dime Savings Bank of Brooklyn.



OTTO HARTWIG, executive secretary of the Long Island Home Builders Institute, shows new insignia designed for the chapter

The bank furnished 3,300 square feet of exhibit space without charge and is carrying on a promotion campaign to publicize the exhibit by newspaper, direct mail and outdoor advertising. The exhibit is to stimulate interest in home ownership.

NAHB President Brock Helps Open Oklahoma City Show

A record number of Oklahoma City Home Builders attended the regular dinner meeting on April 15, when Ed Gavin and R. H. Morris of *American Builder* were special guests. Morris talked briefly of his experience in the publishing end of the building business, summarizing the building picture from 1923 to the present time. Editor Gavin discussed the federal legislative situation and pointed out the need for organization and unity among America's home builders. Both speeches were recorded, and members ordered transcriptions for their own use.

Friday, April 16, Milton Brock, president of the National Association of Home Builders, along with Morris and Gavin, was guest of the Oklahoma City Home Builders at a cocktail and dinner party. Also present were Grover Godfrey, executive vice president of the Dallas Home Builders Association; Fred Seale, Amarillo home builder, and several officials of National Home Shows, Inc.

The Oklahoma National Home Show, which opened Saturday, April 17, was preceded by a luncheon at which Brock was the honored guest. Special guests at the luncheon included the Honorable Allen Street, mayor of

NAHB President Visits Philadelphia



THE annual banquet of the Philadelphia Home Builders Association was a gastronomic delight, attended by about 500. Having fun in "clambake" aprons are, left to right, NAHB President Milt Brock; Executive Vice President Frank Cortright; Mrs. Peggy Raynor, special assistant to Mr. Cortright; Russell Muth, president of the Philadelphia association, and Herbert Howe of the Land Title and Trust Co. The banquet was held during the home show

Oklahoma City, Mr. and Mrs. Morris, Mr. and Mrs. Gavin, J. V. Tully, chairman of the Home Show Committee, J. Wilson Swan, president of the Oklahoma City Real Estate Board, Oliver Black, president of the Tulsa Home Builders Association, Godfrey, E. P. Lamberth, and Avery Mays, all of Dallas, Texas. Others at the luncheon were active and affiliate members of the Oklahoma City Home Builders,



KIOWA Chief Saunkeah, Honorary Kiowa Chief Milton "Great Builder of Many Wigwams" Brock, and Mrs. Saunkeah

their wives, and exhibitors at the Home Show.

High spot of the luncheon was the presentation of Indian headgear to Brock by Kiowa Chief Saunkeah and his wife. As the feathers were placed on Brock's head, he was named honorary Kiowa chieftain "Great Builder of Many Wigwams."

Immediately following the luncheon 10 buses transported the luncheon guests from the Skirvin Tower to the Municipal Auditorium for the premier opening of the Home Show. An hour later the show was formally opened.

The Oklahoma National Home Show lasted nine days. An estimated crowd of 77,000 people saw the various display—an average of more than 8,000 a day.

Denver Magazine Shows How Slums Can be Eliminated

The Denver Association of Home Builders monthly magazine has an attractive new format. In the first appearance in the new dress, the magazine carries a meaty formula for clearing up slums in Denver. Stanley C. Brandenburg, executive vice president, tells how the job can be done in an editorial.

Brandenburg's recommendations are that Denver's mayor give thought to enforcement of local health and building regulations instead of seeking federal funds for clearance of Denver's so-called substandard areas. In effect, he advises the same kind of program that Baltimore has been carrying on and which has been widely publicized by NAHB.

Bridgeport Association Names Arnold Olson as Executive

Arnold P. Olson has been named the first executive secretary of the Home Builders Association of Greater Bridgeport in Connecticut.

Mr. Olson is experienced in advertis-



ARNOLD P. OLSON

ing and sales promotion in the building materials field, and as a public relations consultant.

for immediate delivery
another
 sales-builder!

Carey BRICSULATE

insulated brick siding!

Quick
 Facts

- ▶ insulation plus structural strength
- ▶ pleasing brick or stone design and house-time beauty
- ▶ thick granule coverage—Brick design in Red, Red Blend, Tapestry, Gray Blend or Light Buff
- ▶ stone design in Gray Blend
- ▶ shiplap edges all around—for precision alignment, easy application, greater uniformity—no "picture framing" along individual panel board edge

Here it is... back to help you sell *more* siding jobs... *Carey Bricsulate!* It features *plus* qualities such as: thick, 1/2 inch weather-tight insulation board... **CAREY** asphalt saturating top and bottom, with deep penetration that assures 50% longer *weathering*... heavy mastic coating that is locked right into the surface, with every single piece inspected to be sure the coating *is* anchored... pleasing, colorful granules deeply embedded for lasting beauty... shiplap edges all around, for tighter weather seal, easier application, better finished appearance! Look at the *additional* qualities listed on the left.

Better? You bet it's better! Add this quality **CAREY** product to your line today. Like *every* **CAREY** product, it's backed by 75 years of constant, careful research and development. Also available in stone design.

ASK YOUR **CAREY** DEALER about this newest addition to the **CAREY** line. *Carey Bricsulate* sells. You'll build more business with better satisfied customers. Order direct from your **CAREY** dealer or drop a post card to Dept. AB-6.

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75
 years serving home and industry

THE PHILIP CAREY MANUFACTURING CO.
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Asbestos Roofing and Siding • Asphalt Shingles and Roofings
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NEW KELVINATORS...all one width...



**MAKE PLANNING
EASIER
THAN EVER!**



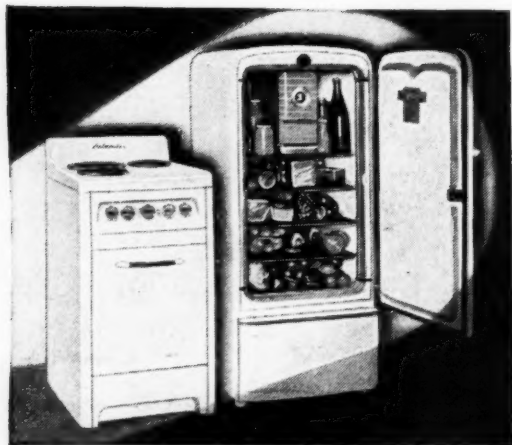
**Now You Can Choose from 5 New
Kelvinator Refrigerators all 31¼"
Wide...4 New Kelvinator Ranges
and a Home Freezer, all 39" wide.**

Yes! The *identical widths* of Kelvinator's 5 new 1948 Refrigerators plus 4 Ranges and a Home Freezer, all *one width*, give you a ready reference for easy kitchen planning. And when you plan this easy, Kelvinator way, your clients can choose *any combination* of top-quality Kelvinators within their budgets without a change in floor plans!

Ultimate in efficiency...Kelvinator's *new kind* of refrigerator is refrigerated from *Top-To-Bottom*. It provides 8½ cu. ft. within the shelf area, *plus* approximately 2

cu. ft. used by the new refrigerated Fruit Freshener. Takes no more floor-space than many refrigerators of smaller capacity. Companion-piece...Kelvinator's "Automatic Cook" Electric Range, now with all controls on the new back panel...easy to see and use. "Up-Down" unit converts from deep well cooker to 4th surface unit...giant double-unit oven...new Electric-Fast surface units . . . pressure cooker available for deep well! And there's the new 6 cu. ft., Space-Saver Home Freezer to give any family deluxe eating with economy.

Kelvinator — of Course!



**For Smaller Kitchens... "Space-Saver"
Package gives Small Kitchens Big-
Kitchen Advantages!**

"Space-Saver" Refrigerator, 24" wide, is full 6 cu. ft.—holds 50% more food than the prewar model of identical outside dimensions. Companion range is only 21" wide—new design permits installation flush against wall. Features a full-size oven...three new, Electric-Fast, tilt-up surface units—one 8", two 6". Kelvinator quality throughout.

For further information, write Kelvinator Division,
Nash-Kelvinator Corporation, Detroit 32, Michigan.

AMERICAN BUILDER

L D I T O R I A L

Senate Action on S. 866

PASSAGE of S. 866 in the Senate appears to have been the result of a welter of complex political maneuvering for personal and party preferment in an election year. It is regrettable, if not tragic, that a bill on which hangs so much of the future of free private enterprise and representative government should have become a mere political football in the upper branch of Congress.

Very briefly, this is what happened in the Senate. As in 1947, when the bill died in the House after being passed by the Senate, S. 866 was reported out of the Banking and Currency Committee by the narrowest possible margin, a 7 to 6 vote. This almost even division of opinion in committee should have called for adequate public hearings, which were not held. After several days of debate on the floor, during which efforts were made to strike the public housing provision from the bill, a roll call vote was taken. The result was 49 for the public housing feature, 35 against, and 12 not voting. The 49 who voted for the public housing section included nine Senators who heretofore have been on the other side. Capitulation to the political expediency of the moment appears to be the only explanation for the switches.

While a roll call vote was taken on the public housing section, a voice vote was taken on the bill itself. Such a vote can be justified only when it seems unnecessary, for any of a number of reasons, to record who votes for and against. Certainly, the importance of S. 866 and the interest in it are great enough to have warranted a roll call vote. The fact that a voice vote was taken, and at a time when many seats were vacant, seems to indicate that a majority of the Senate did not wish to be on record in so controversial an issue. It leaves each Senator a choice of several ways to explain his recorded vote on public housing if, during the election campaigns, he should find it desirable to straddle.

By the time this appears in print, the House probably will have disposed of the bill in committee or on the floor. At this time (May 1) it is idle to predict what will happen. If the House succumbs to the same type of political chicanery that appears to have influenced the Senate action, and thus permits its individual members to evade responsibility to their constituencies, the country will be committed to an almost irrevocable federal public housing program. Experience in other countries has shown that once a little public housing is begun, there is no way to stop the spread. Eventually, all housing is public housing, and there is less housing and at higher unit costs than under a free competitive system.

At this time it can only be hoped that the House meets the issue with the same intelligence and courage it has displayed in the past. If it does, the public housing section of S. 866 will be defeated. If, however, the House goes the way of the Senate, the industry will have to constitute itself a vigilance committee to dig out the facts on public housing costs and results under S. 866, and disseminate those facts widely. An informed public can be depended on to demand repeal of the public housing section of the bill.



AIRPLANE view of Essex Village shows downtown Miami in the background



THOMAS P. COOGAN, Miami, Fla.

ARCHITECT'S drawing of shopping center now under construction. This building will contain ten stores representing different businesses. Center is laid out to provide off-street parking for 100 cars

Mass Production

Pre-assembled wall units, transported from assembly yard to house foundation by an ingenious method, help Miami builders keep costs low

ESSEX VILLAGE, a new community to house 3,500 persons in the Miami area, is being built in suburban Hialeah.

Developed by Coogan-Davis, Inc., the \$7,000,000 project eventually will include 600 two- and three-bedroom homes selling at \$6,700 to \$7,600, a complete shopping center, 70 duplexes and 112 apartment units for rental purposes. When completed, it will be a self-

sufficient community with all the municipal services of the city of Hialeah.

Thomas P. Coogan, secretary of the National Association of Home Builders, and past president of the Florida Home Builders Association, is the developer and builder of Essex Village. William M. Davis is associated with him.

Work at Essex Village was begun in January, 1947. By the end of





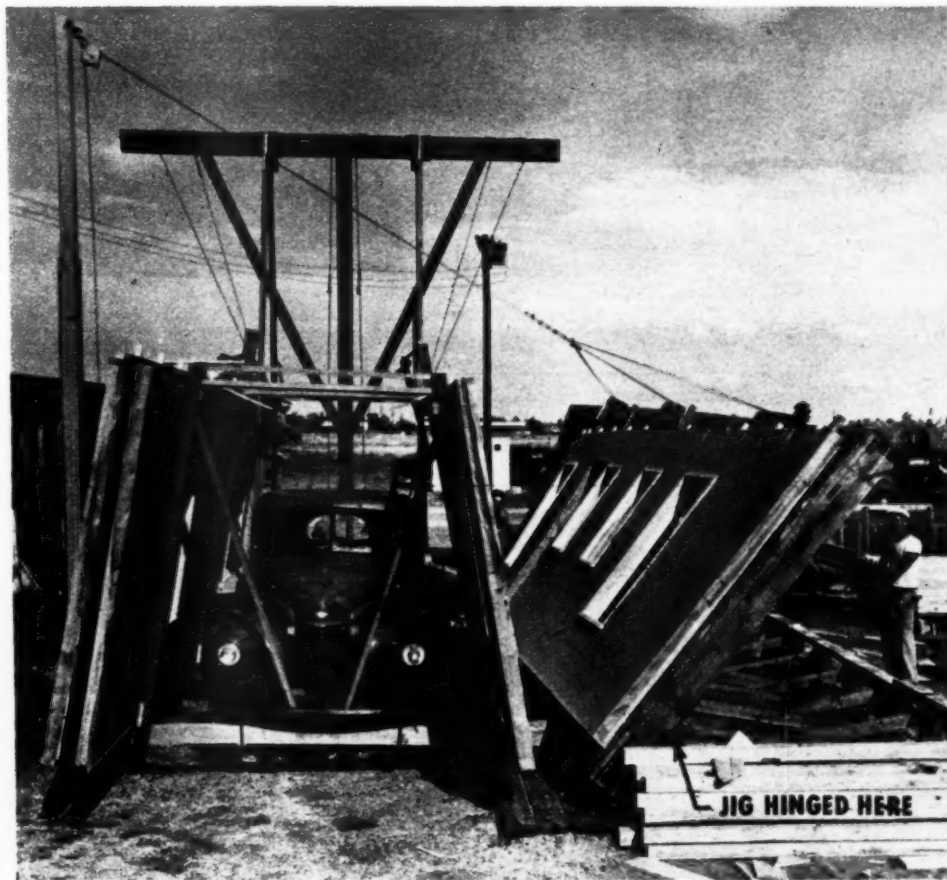
A COMPLETED Essex Village home, one of the 600 being constructed in Hialeah, a suburb of Miami, Fla.

Does It—A House for \$6,700

this year, about 350 homes will be completed if building schedules which now average about two homes a working day, are maintained. The shopping center is under construction. Work is to start soon on the 70 duplexes, to be followed by the apartment units.

Most of the homes are occupied or are being built for veterans. Located on 60x108 foot lots, these well-designed frame houses will sell for \$6,700 for the two-bedroom types and \$7,600 for the three-bedroom unit. The price includes electric stove, refrigerator and a hot water heater. This is an attractive sales point to the GI purchasers. FHA mortgages, financed through Investors Syndicate, are for \$6,000 on two-bedroom homes and \$6,700 on the three-bedroom type.

"We have several goals in this development," said Mr. Coogan. "The foremost is to offer to purchasers, particularly to veterans, a good home, well-built, well-planned and nicely located. Another goal is to develop a high class residential community. We feel that we are doing this by making use of all municipal facilities Hialeah has available and by setting up restrictions on future building within the community to prevent deterioration of values.



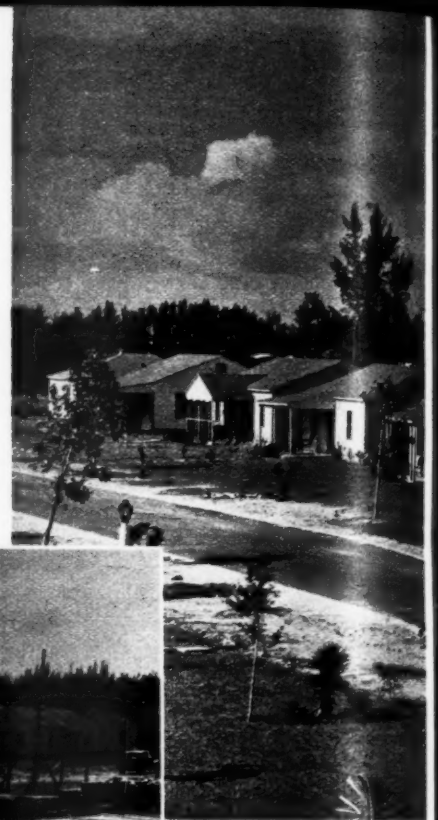
WHEN a wall is completed, it is lifted on a specially-rigged truck. Top of jig table is hinged to allow wall to lift to vertical position on frame carrying panel

"We have planned our homes on the basis of materials available, to offset as much as possible high prices and shortages. We have endeavored to give purchasers all the essentials of comfortable living and, at the same time, to keep our price range so that the purchase of our homes is a possibility for a large group of veterans."

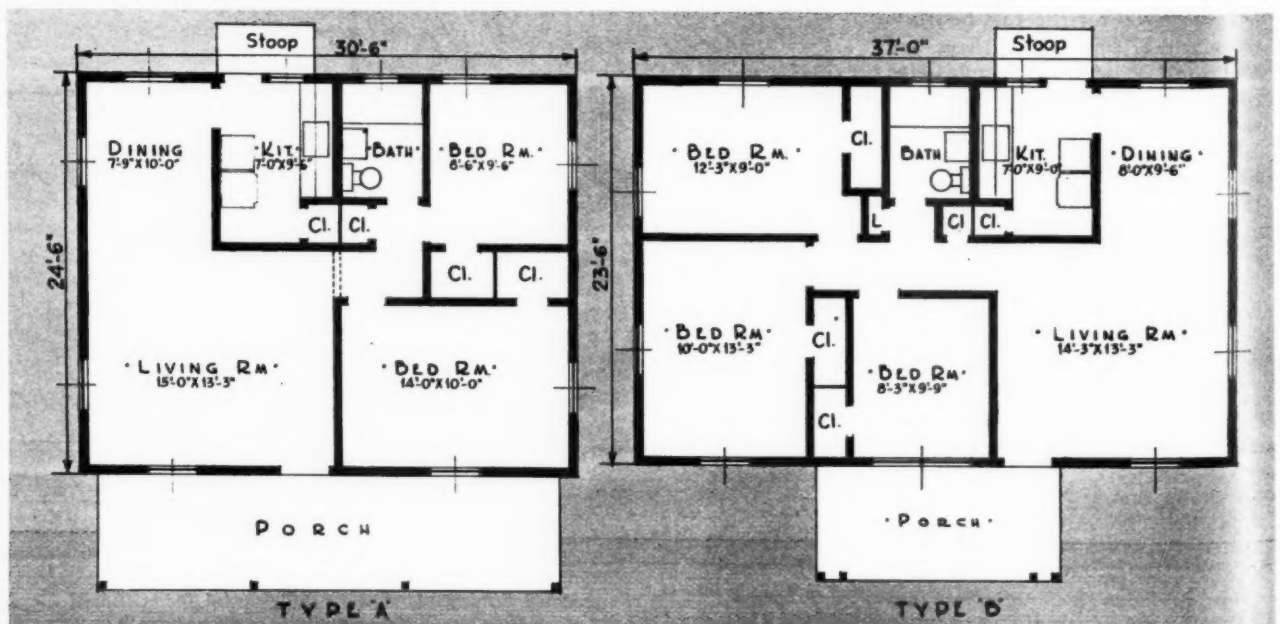
A new form of house assembly—the only one of its kind—is used by the Coogan Company to achieve maximum production. Virtually all lumber for the homes is pre-cut to

exact measure in the assembly yard on the project. Walls are assembled, one by one, with the use of a jig. As each wall is constructed, it is loaded on a specially-rigged truck, and when four walls are completed, the truck rolls off to the site of the house. There a crew unloads the four walls, one at a time, directly from the truck to their position on the prepared foundation, makes them fast, ties them together—all in the space of about half an hour.

The truck is rigged with a special



CARPENTERS in Essex Village assembly yard complete a wall or "panel," using pre-cut timber which is quickly fitted into place. Other assembly work is also being carried on in the yard. Completed homes are in background. Typical plan of two- and three-bedroom houses shown below. Variations in layout are made on basic plans



ONE of the numerous streets in the Essex Village development showing large number of houses already completed. Note number of variations in exterior treatment of the basic floor plans

THOMAS P. COOGAN, builder, opens the door of his two hundredth completed home for the daughter of a marine veteran who has just taken possession of the new house



frame which accommodates two finished wall panels on each side. The bottom of the jig table is hinged to its supporting frame. The jig table and panel are lifted to a vertical position by a gin pole a convenient distance from the jig table to permit the specially-rigged truck to drive between the table and pole. The panel slides off the jig onto the truck rigging. This process is repeated until all four panels are loaded. They are placed on the truck in their proper sequence to expedite the assembly of panels on the site.

Gables are assembled in the same

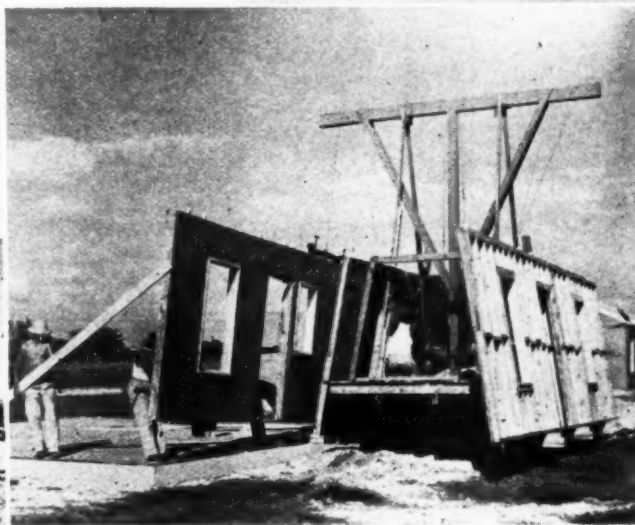
manner and are delivered by truck to the houses. Virtually all lumber needed for beams, rafters, and partitions is delivered pre-cut and in exact amounts to each job.

The two basic plans of two- and three-bedroom types have ten exterior variations. More variety is gained by staggering the position of the houses on lots. Different colors are also used in the shingles on sidewalls and roof, as well as in the trim.

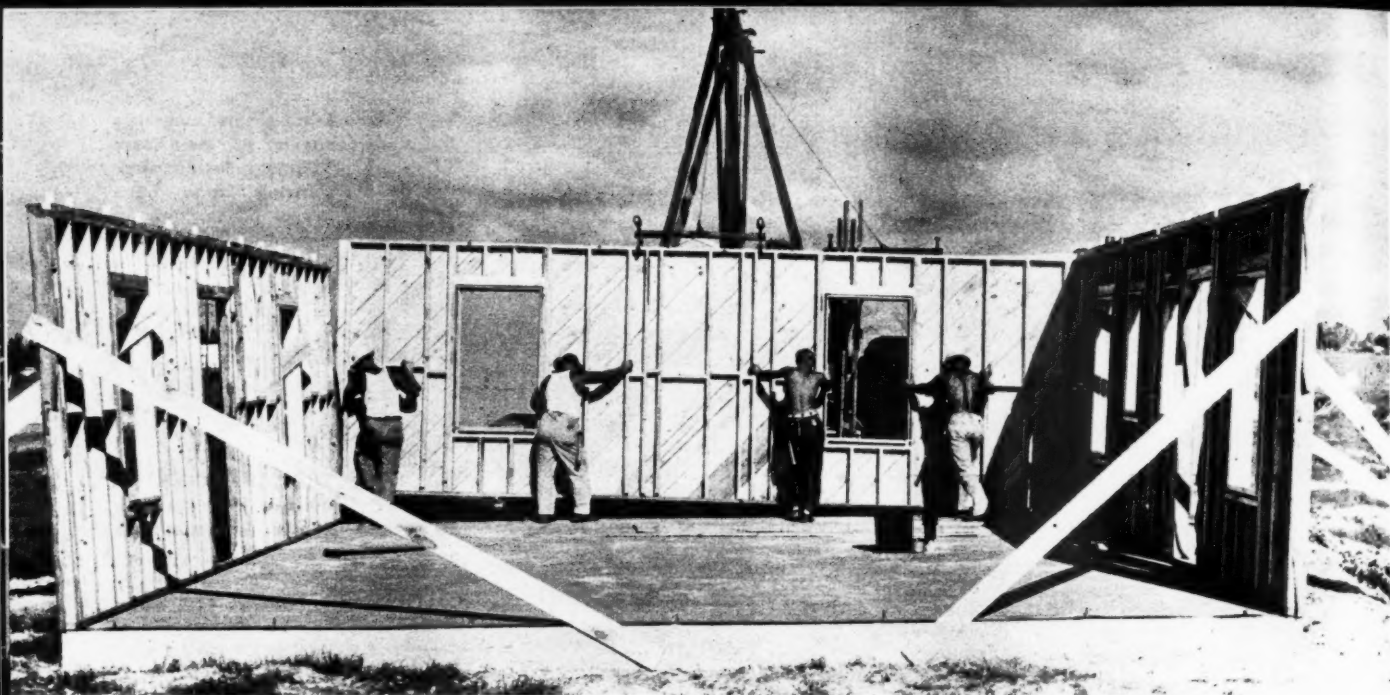
Coogan-Davis, Inc., has put in all the paved streets and utilities for Essex Village, developing the subdivision from entirely unim-



MONOLITHIC slabs and footings are poured and finished in an operation using reversible forms. A one-piece aluminum template is used to locate anchor bolts in slab. Rough plumbing in place



WALL installing operation. The first wall is being lowered into position after having been delivered to site by specially-rigged truck. Balance of walls are quickly placed and anchored



TWO walls of an Essex Village home have been placed in position on foundation, while third wall is unloaded from truck. Crew makes the walls fast and ties them together. The four walls are placed in position in half an hour

proved property. Landscaping includes spot sodding of grass and the planting of quick-growing trees and shrubs.

The shopping center, to cost approximately \$400,000, will house about ten major stores, representing the various types of business needed to make a one-stop center. A theatre which is planned for the shopping center will be added later. The business center is laid out to provide ample off-street parking for about 100 cars. The store building will be screened from the adjacent residential sections by landscaping. The apartment units and the duplexes, rental properties, will be near the shopping center.

James W. Voorhies, Miami, Fla., is the architect for the project.



ADDITIONAL area is gained in the living room through elimination of a separating partition to the dining portion. This arrangement permits an extension of activities from one room into the other, whenever the need for added space arises



SMART, stylish interiors are possible in Essex Village homes as indicated in the view of living room at left. Asphalt tile floors throughout are placed directly on concrete slab. Sheetrock for wall finish is covered with heavy mastic paint

ECONOMY HOUSE

For June Brides

June Weyerhaeuser Design No. 4130 has a cubical content of 20,020 feet, with space for finishing second-floor bedroom and lavatory later

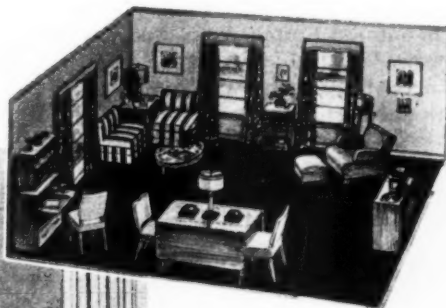


THIS house has a simple design pattern, given character by shutters and windows

THIS small house design has many features for convenience as well as economy. While defined as a four-room, one-story home, it is designed with a built-in stairway to the unfinished second floor. When desired, a third bedroom with a lavatory may be added. To achieve economy the second-floor lavatory will utilize the same soil pipe as the first-floor bathroom.

In designing the exterior of this home, the architect has used a simple, popular design pattern and given it character by the ingenious use of colorful shutters of unusual design. Note how the sash are divided with horizontal muntins to give accent to the feeling of modern design, and to contribute highlights which make a home so inviting to approaching guests.

The living room, 18x11 feet, 5 inches, offers many possibilities for furniture arrangements. The long, clear wall at the rear serves as an excellent base from which to plan a furniture layout. Two double-hung windows in the front wall and one window in the side provide good ventilation and ample natural light. The kitchen is in a modified U-shape, with generous cabinet space and all facilities conveniently arranged. The dining area is next to a window and separated from the kitchen by a counter rail. The bedroom has two large closets and a vestibule closet is conveniently located near the front entrance.



FURTHER details and working drawings on this house and others in this Weyerhaeuser series may be obtained from 4-Square lumber dealers. If there is no 4-Square dealer near you, write Weyerhaeuser Sales Co., St. Paul, Minn.



WELL built, simply-designed small homes find ready acceptance in Indianapolis subdivision.

House, Lot and Landscaping \$7,700

IN his book "Inside U. S. A." John Gunther cites Paul Hoffman, president of Studebaker Corporation, currently head of the Economic Cooperation Act, and a native of Indiana as "the kind of modern executive who is testimony to the fact that despite everything the free enterprise system will work if you think of it in terms of enterprise for the many, not just the few."

Operative builders of Marion County, Ind., further demonstrated this fact by completing 4,300 homes in 1947, the largest number in the county's history, and sufficient to alleviate to some extent the housing shortage of the community.

Typical of the kind of low-cost housing which comprised a large percentage of this total figure is the small home built by A. H. M. Graves, prominent Indianapolis builder. Realizing the sense of civic responsibility and community pride that comes to a man who provides his family with a home of its own, Graves developed a practical small home to sell for \$7,700, including a 40x174-foot lot.

Designed by Alden Meranda, Indianapolis architect, the house is a one-story 4½ room frame bungalow, trimly tailored in appearance. Its compact layout and sturdy construction reduce maintenance to a minimum and keep heating costs down. The floor plan is flexible and can be varied for both interior and exterior treatment.

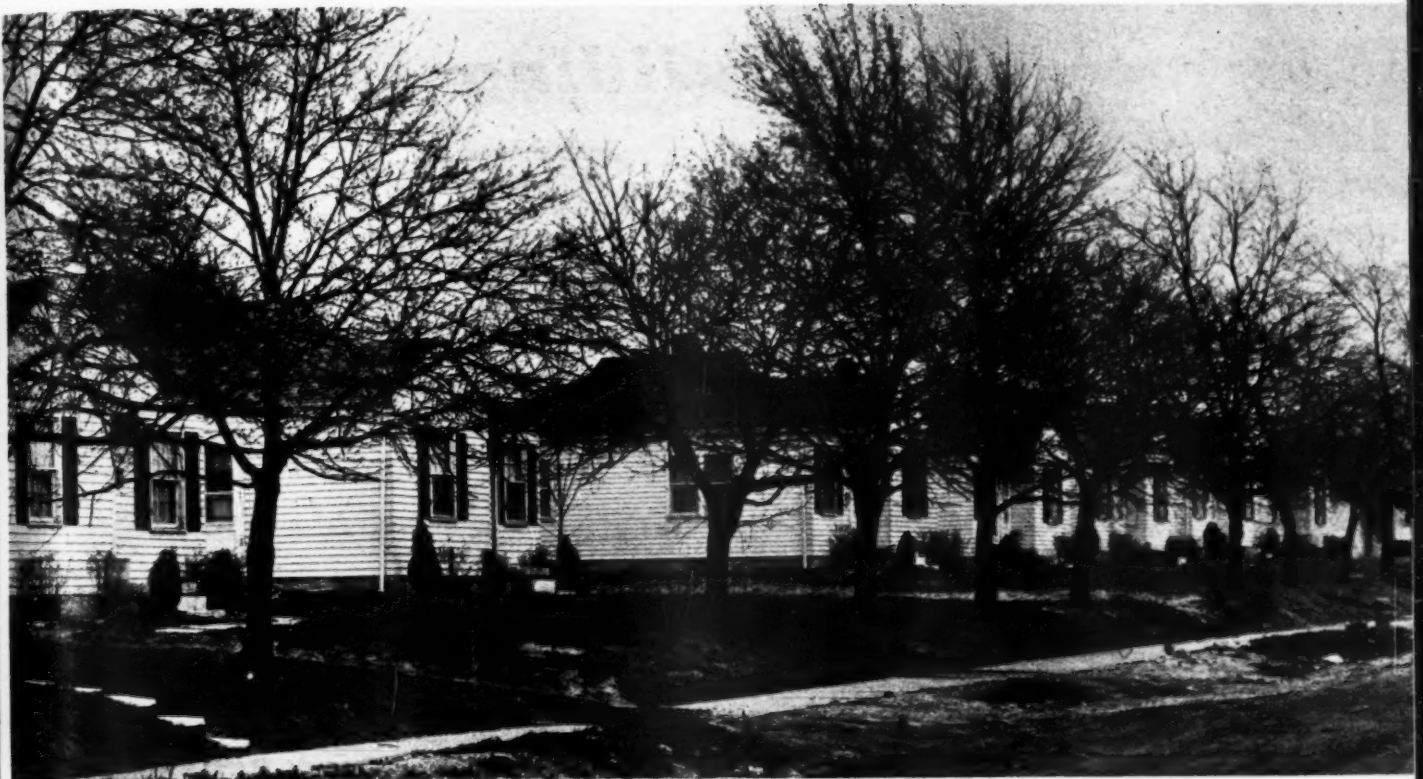
The overall dimensions of the house are 24 feet by 30 feet, providing a living area of 14,800 cubic feet. A full basement made from concrete blocks with concrete flooring forms the foundation. Exterior walls below grade receive a ½-inch coat of cement plaster and pitch or asphalt waterproofing. The siding is of beveled wood on insulation board sheathing, and the interior walls are plaster over ⅝-inch gypsum lath. Asphalt shingles are used on the roof. The house is insulated with 4-inch mineral wool.

The house was planned with an eye to the furnishings and living habits of its prospective owners. Thus, the windows of the living room and two bedrooms are so located

they provide space for diverse arrangements of furniture. The dinette is separate from both the living room and kitchen, and features a good-sized window and storage cabinet. Five closets provide adequate storage space.

Prefinished oak flooring is used throughout except in the bathroom and kitchen where linoleum is laid. Kitchen cabinets are of wood, milled locally, with linoleum tops. A metal wall cabinet with mirror is installed in the bathroom. One variation of the floor plan permits bathroom and kitchen plumbing to be installed back to back, reducing the amount of behind the wall piping. A warm air, coal-burning gravity furnace, with registers in the baseboards, comprises the heating equipment.

The house is delivered completely decorated. Attractive wall paper is used in all rooms except the kitchen and bathroom. Here the walls receive three coats of off-white enamel. Painted cloth window shades are also provided. Three coats of white paint are applied on the exterior of the house



Basic landscaping, included in the sale price, enhances appearance of the community

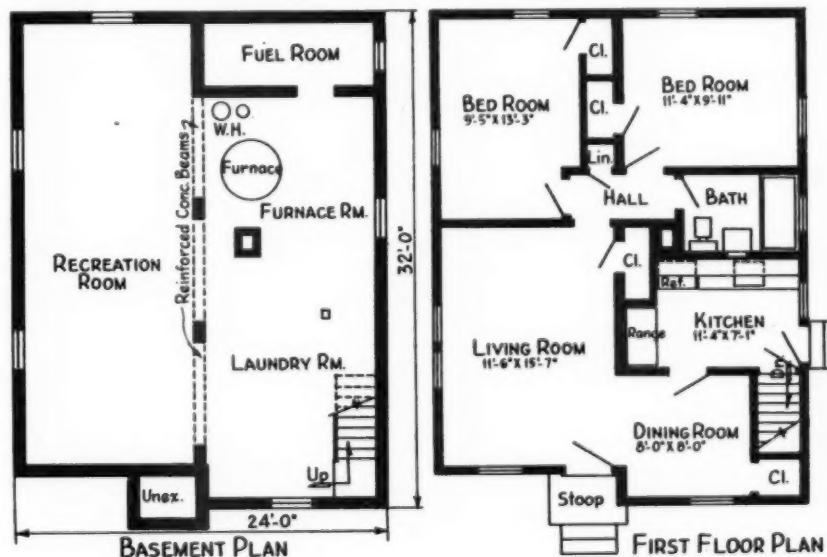
Indianapolis builder converts delinquent land into thriving community of simply - designed small homes for moderate income group

with the slatted and batten shutters on the front windows painted in color. The yard is sodded to the rear, and shrubbery planted in front. A cinder side drive completes the landscaping.

Graves has completed 112 of these homes in a subdivision three miles southeast of Indianapolis, and has additional units currently under construction. Platted in 1911, the subdivision had only nine houses built when he began his development, although sidewalks, streets and sewers had been installed, and trees planted. Taxes and Barrett Law were delinquent, and the owners had given up expecting to realize anything on their investment. Today, city water, gas and electricity have been extended, and the property owners have not only been reimbursed for part of their investment, but have paid up all delinquent taxes, and Barrett Law.

All of these homes have been sold to veterans. Through the combination FHA and GI plan, the only down payment required (Continued to page 150)

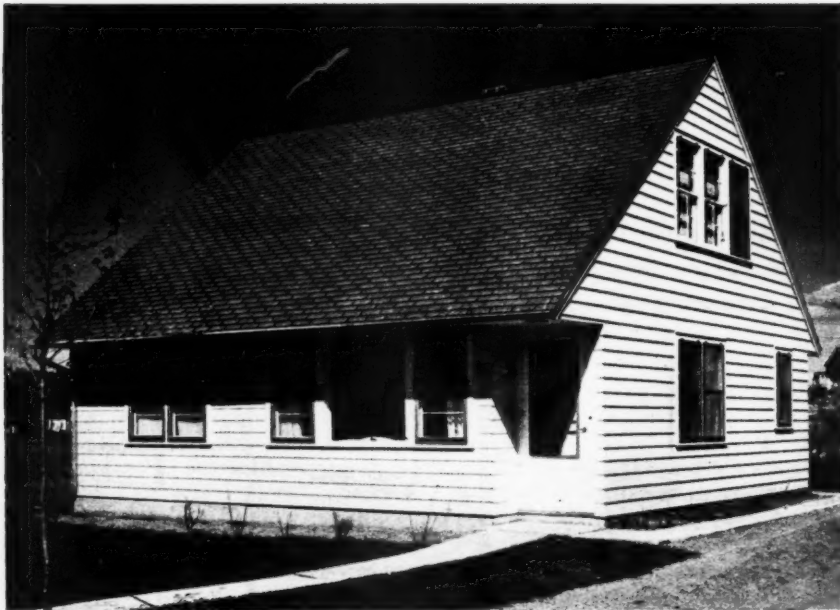
TWO variations of floor plan. Plan shown above right is for house on corner lot. Basement provides space for recreation room, utility and heating units



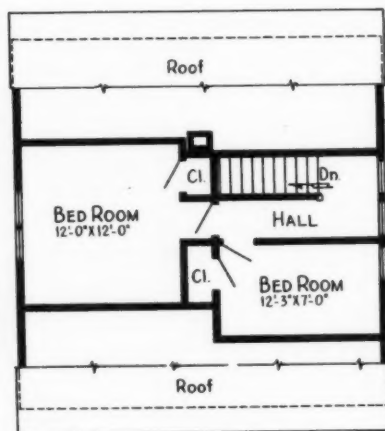
Building Economy



PARTIAL view of Sunnyside Homes was shot from nearby hill during construction period



FIRST FLOOR PLAN



SECOND FLOOR PLAN

ONE-and-one-half story house costs \$9,250 with the second floor available for future expansion. Floor plans indicate the compact and well laid-out room arrangement

Community-minded citizens collaborate with builder to produce outstanding piece of work in spite of transportation difficulties and material shortages

NESTLED among the hills on the outskirts of Red Wing, Minn., is a 30-house project, called Sunnyside Homes.

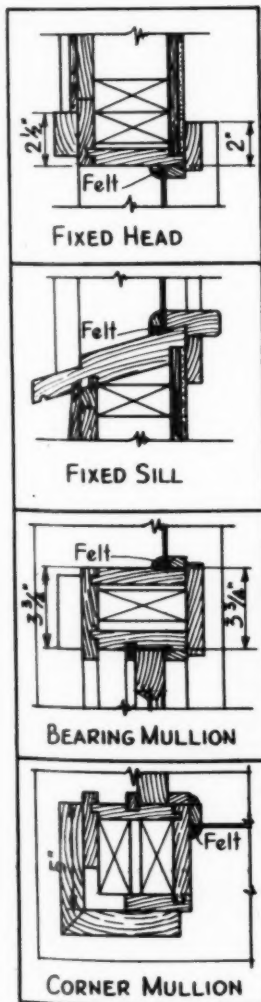
Conscious of the lack of new homes in the area, Dr. Hedin, mayor of Red Wing, and Albert Marshall, owner of the Republican Eagle, the local newspaper, collaborated in this building venture to provide homes for veterans.

The project is under the direct supervision of Robert E. Cerny, a member of the firm of Long & Thorshov, architects, Minneapolis, Minn. Cerny, who also is a professor of architecture at the University of Minnesota, has designed a number of other outstanding veteran housing projects in the northwest area. He has a thorough knowledge of the service man's requirements. He has used many interesting innovations, consistent with economy of construction in this development.

Raymond Olson, builder of Red Wing, Minn., started work on the project in December 1946, on receiving a veterans' priority. Ceiling prices for the different units when the project began were \$6,675; \$7,315; \$8,100; and \$8,750. Since that time cost of labor and materials has increased about 22 per cent for the builder, necessitating an increase in the sale price of the houses. Currently the houses are listed at \$7,250 for the one-story one-bedroom house; \$7,750 for the one-story two-bedroom dwelling; \$9,250 for the one-and-one-half

DETAILS
shows
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Houses in a 30-Unit Project



DETAILS of double-hung windows and fixed sash shows structural mullions for multiple-unit window openings

ABOVE: Street view of completed houses is shown. Informal effect obtained through staggered building line. One-story, one-bedroom house costing \$7,250 shown below. Plan at right shows the service units placed towards street, with living room and bedroom facing the rear



FIRST FLOOR PLAN





story two-bedroom unit with an unfinished second floor; and \$9,950 for the one-story three-bedroom house.

These four types follow a typical architectural pattern and are designed to accommodate the average veteran's family. Picture windows are used in all but the one-bedroom house with great effect. The roof pitch varies with each house, thus avoiding any tendency toward monotonous repetition. The closely clipped gables and wide projecting eaves give a sense of balance and proportion that

adds a measure of interest to an otherwise plain exterior.

Before construction got under way, the site was rolling, virgin territory, high in the hills overlooking the Mississippi river. Before any work could be started on the houses, it was necessary to install sewer lines, water mains, electric lines, streets and sidewalks. The land was subdivided into lots averaging 50 feet in width, with the street layout following a regular grid pattern. Provision was made in the layout for a children's playground.

All of the houses have full basements. When the nature of the terrain would permit it, garages were placed in the basement of the houses.

The plans of each house-type reveal a number of interesting facts. In most of the room arrangements, a closet or wall was placed opposite the entrance door to act as a buffer to the living room. Living rooms are large in all types. In the one-bedroom house, the basement stairs are the only separation between kitchen and living room. The designer has



THREE-BEDROOM, one-story house, costing \$9,900, is shown above. At left, is two-bedroom, one-story house for \$8,250. Both houses are of similar design, yet each one has a distinctive individual appearance

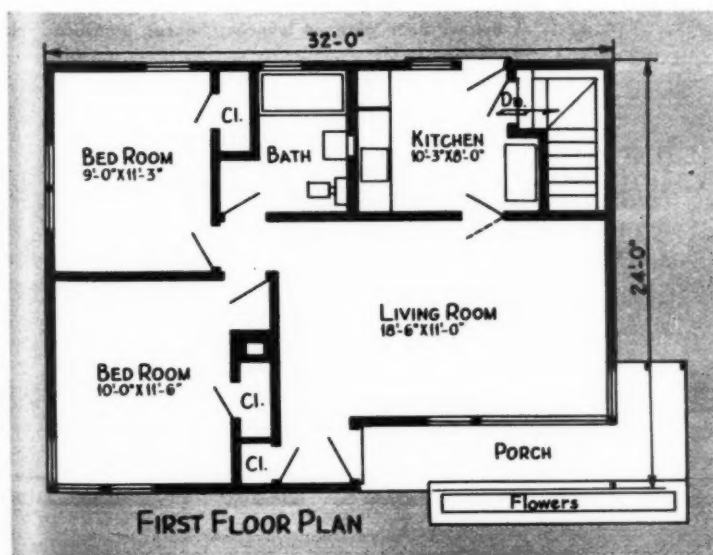
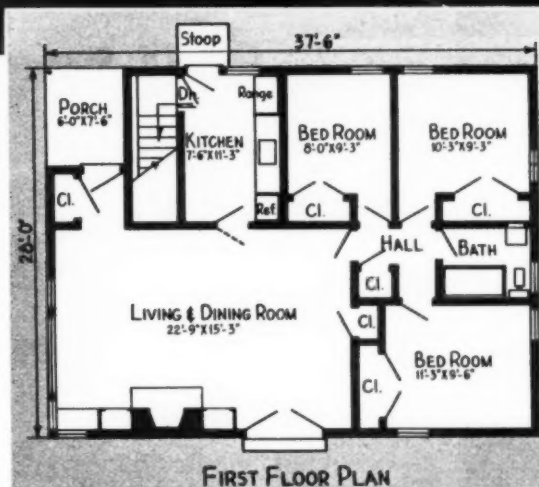


attempted, as far as it was practical, to open up the floor plans by combining several elements.

A saw yard was established on the site where all lumber was precut to size. All cabinet work was fabricated in the saw yard. Carpentry, masonry, concrete work and all rough labor were handled by Olson. Plumbing, electric wiring and heating were sublet.

This is the first large scale operation this builder has done. In the past Olson was employed as building superintendent for a number of large construction companies.

VIEW pictures large living room of three-bedroom house with built-in cases adjoining fireplace. At right, is shown plan of three-bedroom, one-story house. Plan of two-bedroom, one-story house is below

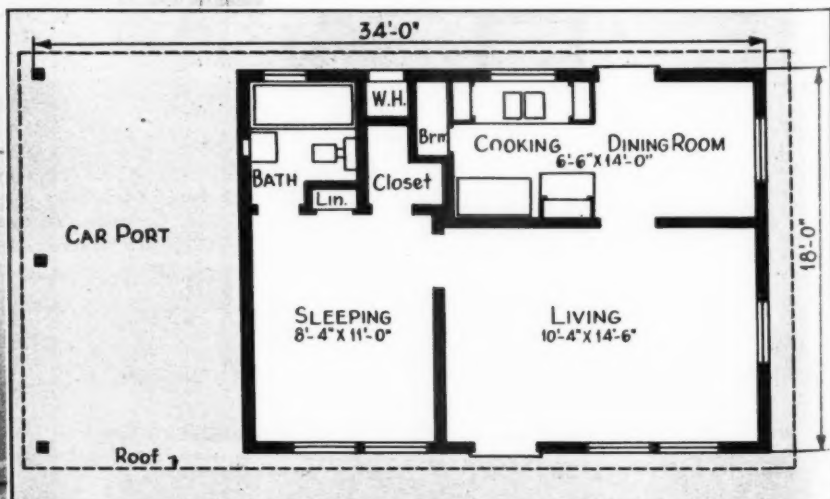
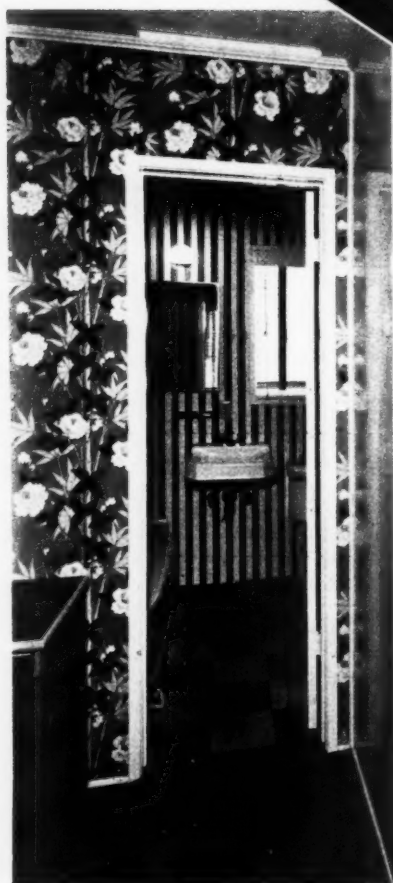


LIST OF MATERIALS USED

- Concrete block foundations
- Concrete floors in basement
- Steel beams and columns in basement
- Wood window frames and sash
- Oak Floors, linoleum in kitchen and bath
- Wood framing, shiplap sheathing
- Asbestos shingle roofs
- Galvanized gutters and downspouts
- Rocklath plaster base
- Clear pine interior trim
- Screens and storm sash
- Rockwool insulation
- Crane medicine cabinet
- Crane plumbing fixtures
- Crane Champion hot water heater
- Waterman forced warm air furnace
- Waterbury oil burner
- Pratt and Lambert points



LIVING-DINING room combination in typical low-priced Delta house is shown above. Attractive entrance to kitchen formed by serving bar. Note clean, modern lines of house in exterior view. Below, floor plan of low-cost house; bathroom, left



Buys This Packaged Economy House

Volume sales and minimum profit on each house enable firm to sell in the low price range

THE Delta Corp., Los Angeles, Calif., is selling houses for as little as \$3,695 on today's high market. To sell at such a low price, Delta's dealers and contractors depend on a volume business. Profits are kept at a minimum on each house.

The Delta Corp., headed by two young ex-servicemen Cedric E. Sanders and D. Gerrard Hoyt, sells, at a guaranteed contract price, a package containing complete materials for one house. The package includes all necessary framing lumber, roofing, exterior siding, interior finish, windows, doors and frames, trim and casing, shutters, window boxes, hardware, nails, and plans. Piping and plumbing fixtures, electrical wiring and fixtures are included in the price also, but are furnished by the local contractor who erects the house. All framing lumber is precision-cut at the Delta mill to exact dimensions and sent to the job ready to assemble.

The packaged house conforms with the requirements of the National Uniform Building Code, the California State, Los Angeles County and City Codes. It follows conventional construction, with 2x4-inch studs 16 inches on center, full sway bracing and solid roof sheathing.

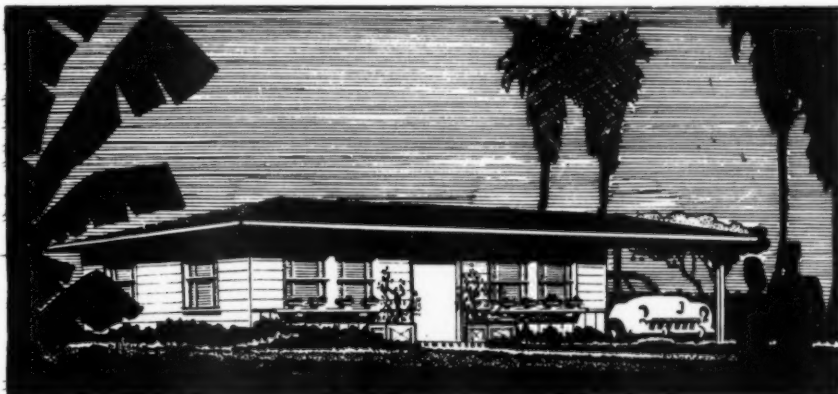
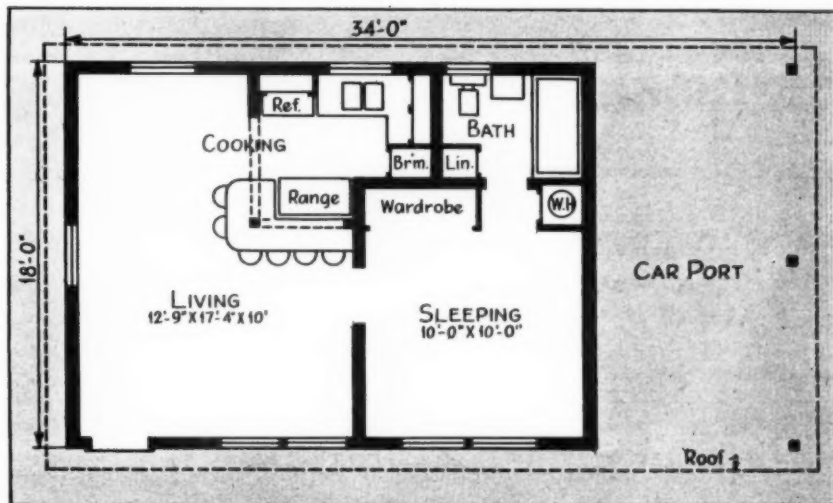
The Delta house comes in several models ranging from a living room, kitchen and bath unit to two-bedroom houses. The smaller units are designed so that additional bedrooms can be added economically and without detracting from the appearance of the house. There is a choice of modern, ranch, or colonial type in exterior design. Redwood siding is used on the exteriors, with vertical pine siding in contrast on the gable ends of some models.

When a Delta dealer sells a house, he makes arrangements with the approved Delta contractor in his area to take the contract to build it. The contractor quotes the established price on the house plus any extras for plumbing and electrical hookups, building permits, walks and driveways. The contractor then orders the packaged house from Delta.

The company has found a large demand for the packaged house. Many of the units are purchased for income and erected on the rear of residential lots or in tourist courts and motels. Many are sold as resort cabins. The Delta Corp. feels it has one solution to the present housing situation.

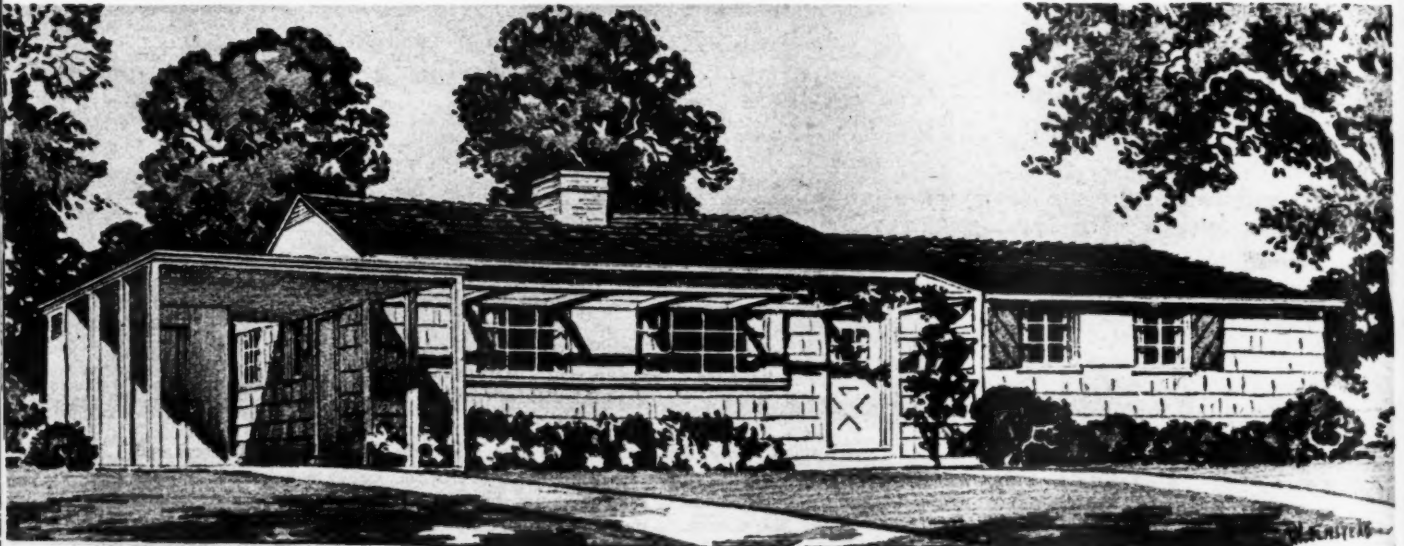


DELTA sales office, above, has wainscot of 12-inch natural finish redwood. Across ceiling are 6x12-inch beams stained red; between the beams are 4-inch boards painted green. When a Delta house is sold, arrangements are made with a contractor in the area to build it. The contractor quotes established price on house plus any extras for plumbing and electrical hookups, building permits, walks or driveways. Contractor then orders house from Delta, but furnishes own wiring and plumbing fixtures



Anicka

**BLUEPRINT
HOUSE No. 17**



FIVE-ROOM house contains approximately 1,000 square feet, is well-planned for privacy and convenience

Sufficient in Size—High in Quality

HOUSES of adequate quality and of sufficient area to accommodate the home owners' needs without overcrowding are in demand today. Granting that costs are up, nevertheless, the first requirement of good planning is to provide enough room for a family to live comfortably. This five-room house, designed by Architect Walter T. Anicka, Ann Arbor, Mich., contains approximately 1,000 square feet.

Incorporated in the house are as many of the latest conveniences as space and planning will permit. The rooms are arranged to give maximum privacy, convenience and sunlight. The front door opens into a foyer separated from the living room by a glass partition.

The fireplace is located in the center of the sidewall of the living room and is constructed of painted common brick. On the opposite wall is built-in storage space with a place for telephone, radio, phonograph records, and books. Cross ventilation is obtained in each bedroom

through windows located on two walls.

The kitchen, while not large, is arranged in work and eating centers for maximum convenience. Utilities for heating and laundry work are located in the basement. A large space for recreational purposes is also provided.

A special feature of this house is the carport with large, outdoor storage space available for garden tools and oil tank. This area can also serve as an outdoor porch in season.

The construction work follows the general trend for this type of house. Framing and exterior surface materials are of wood. Foundation walls are of concrete blocks. Walls above and ceilings are plastered. Heating may be forced warm air or hot water. The inside finish, the decorations, and floors are all in keeping with the general character of the exterior. This house may be placed on a 65 foot lot, with all services toward the front. The rear of the lot would then be available for outdoor living.



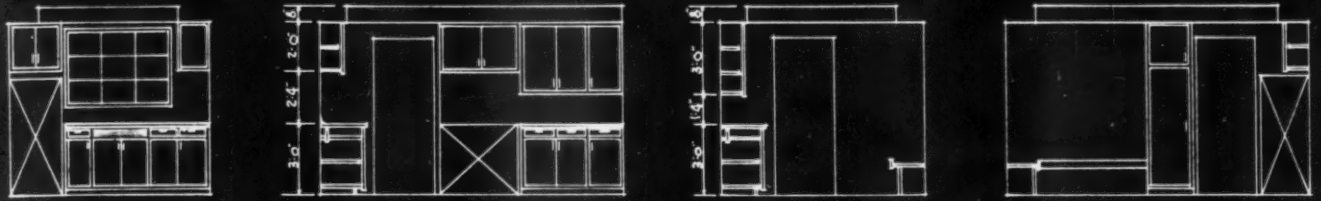


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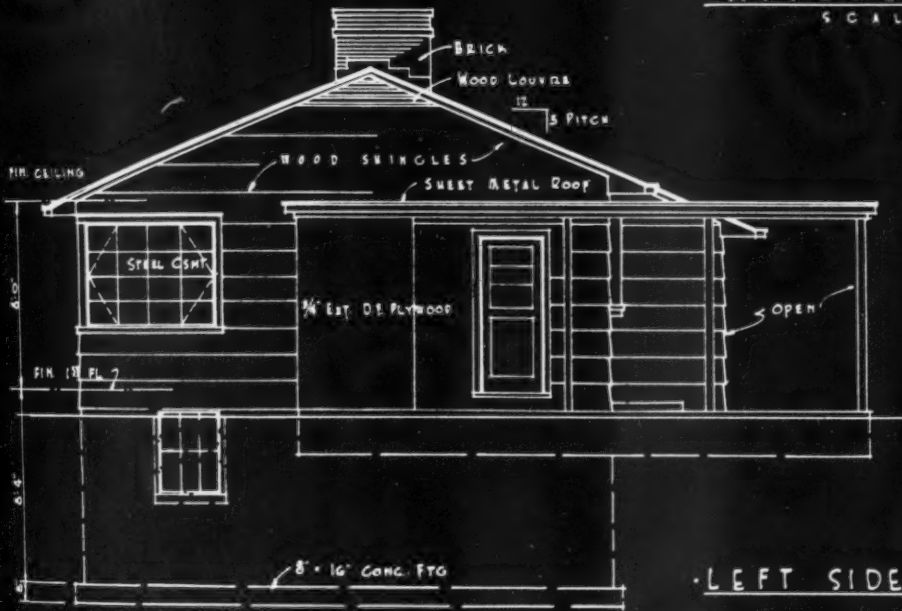
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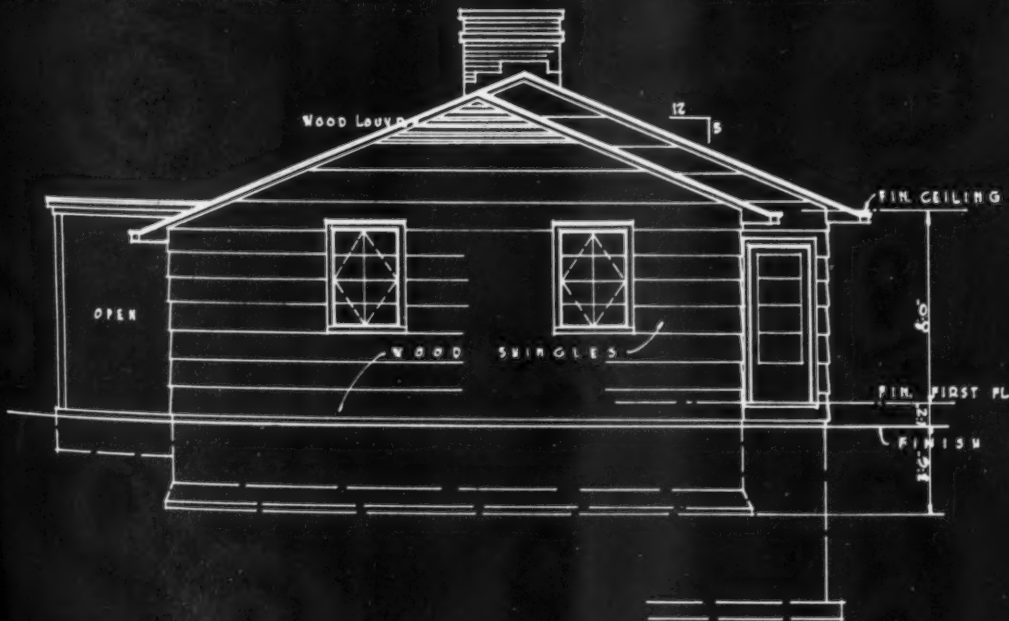
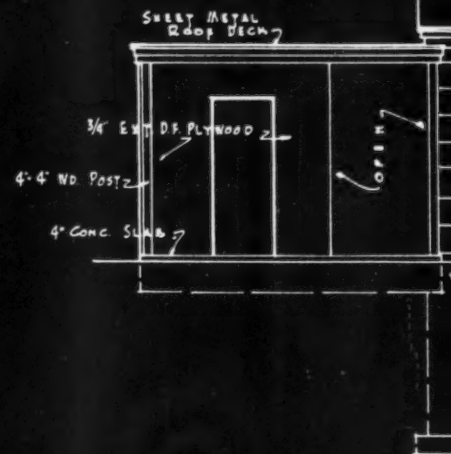
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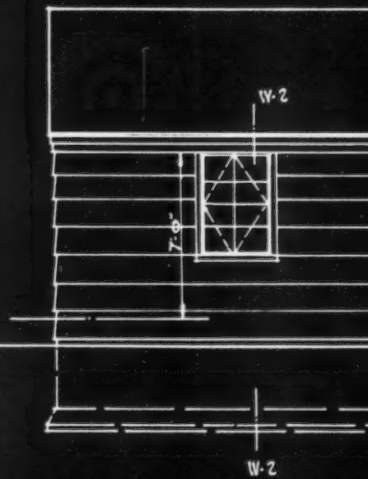
KITCHEN DETAILS
SCALE 1/8" = 1'-0"



LEFT SIDE.



RIGHT SIDE.

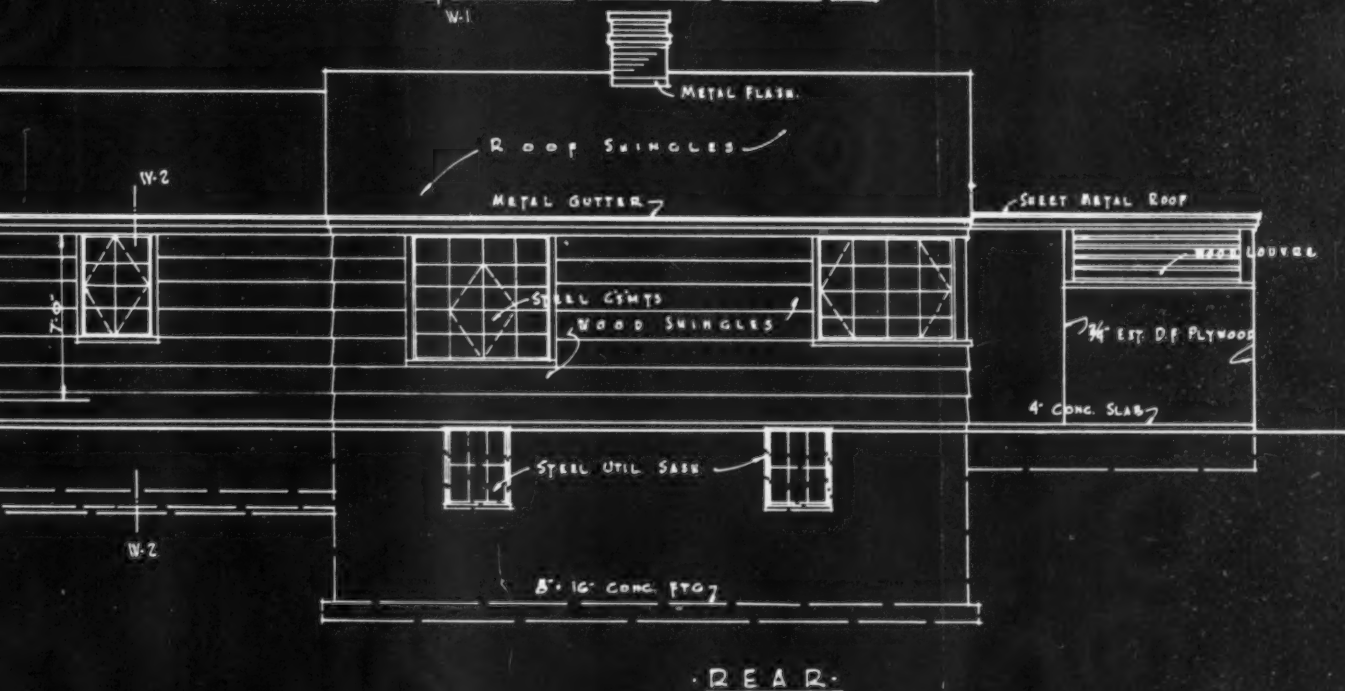
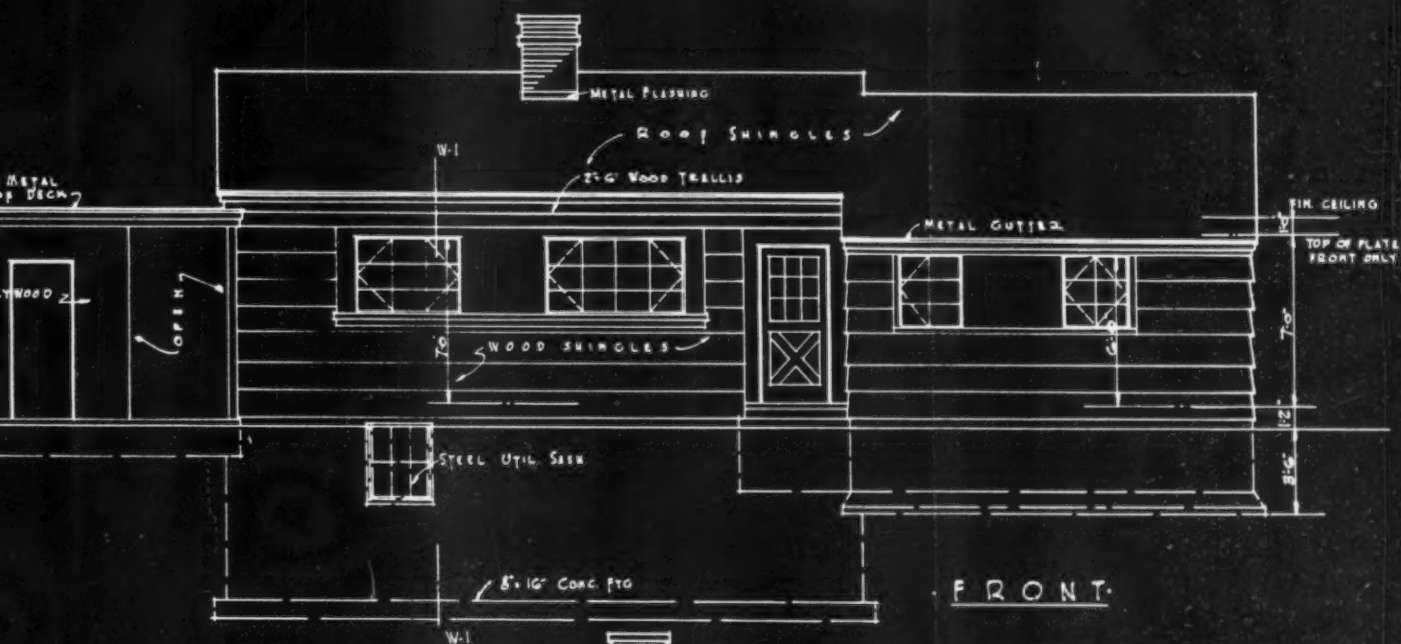


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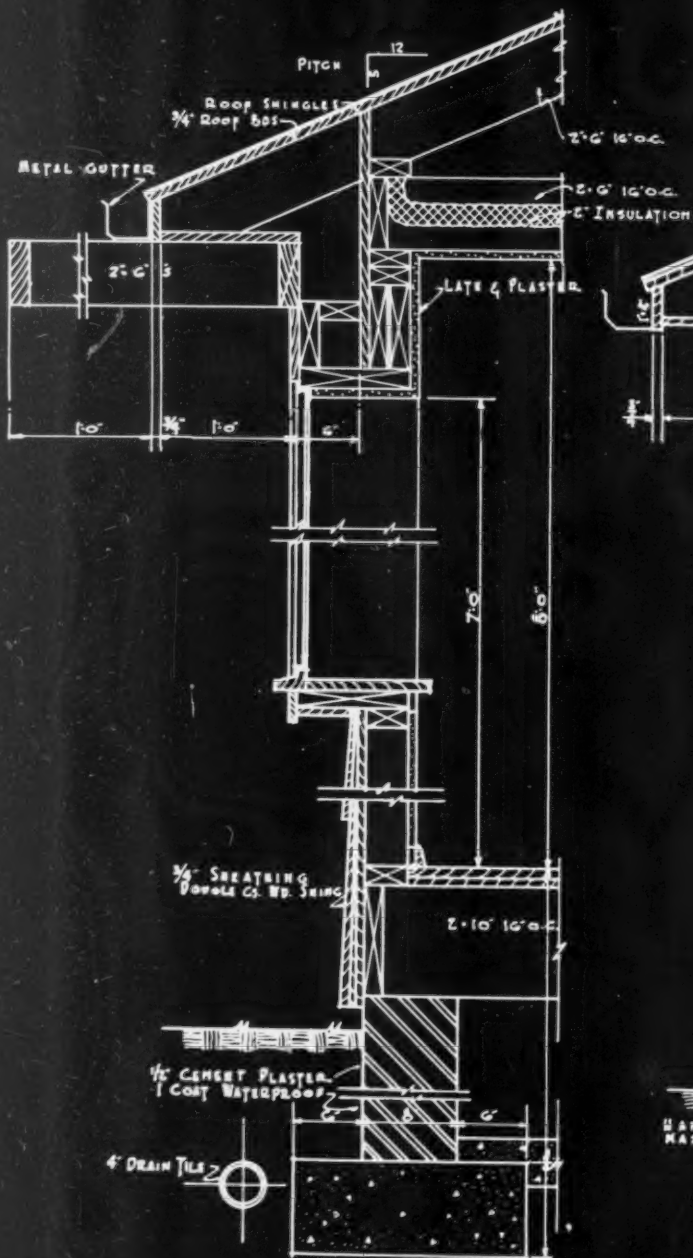
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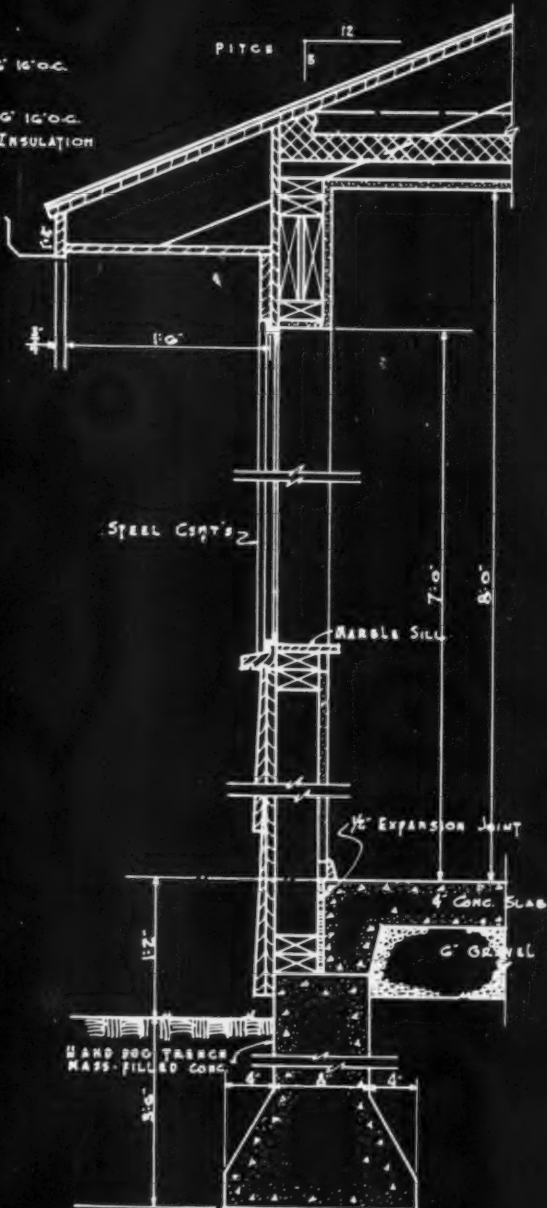


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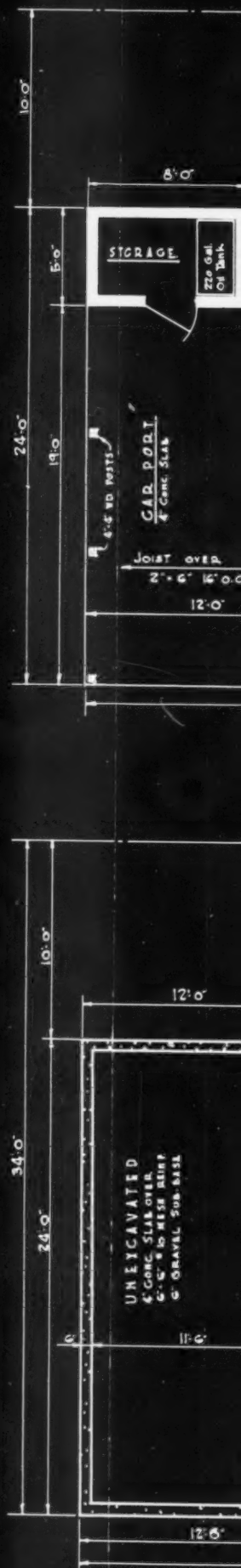
DESIGN No. AB 130
AMERICAN BUILDER BLUE PRINT SERIES
Designed By
WALTER T. ANICKA. ARCHITECT.
Ann Arbor, Michigan.
Simmons Boardman Pub. Corp. 105 W. Adams St. Chicago, Ill.

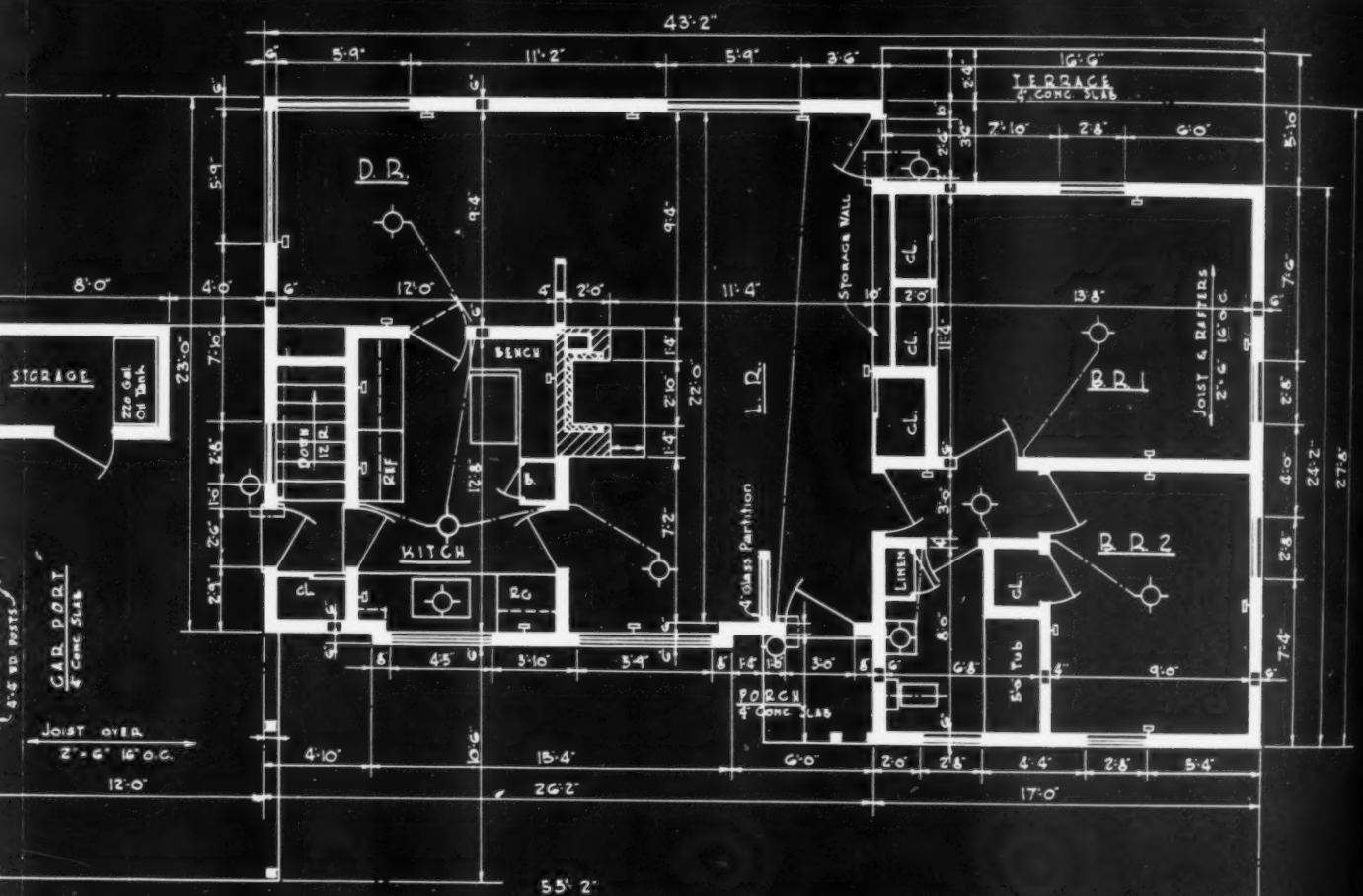


SECTION W-1
SCALE 3/4" = 1'-0"

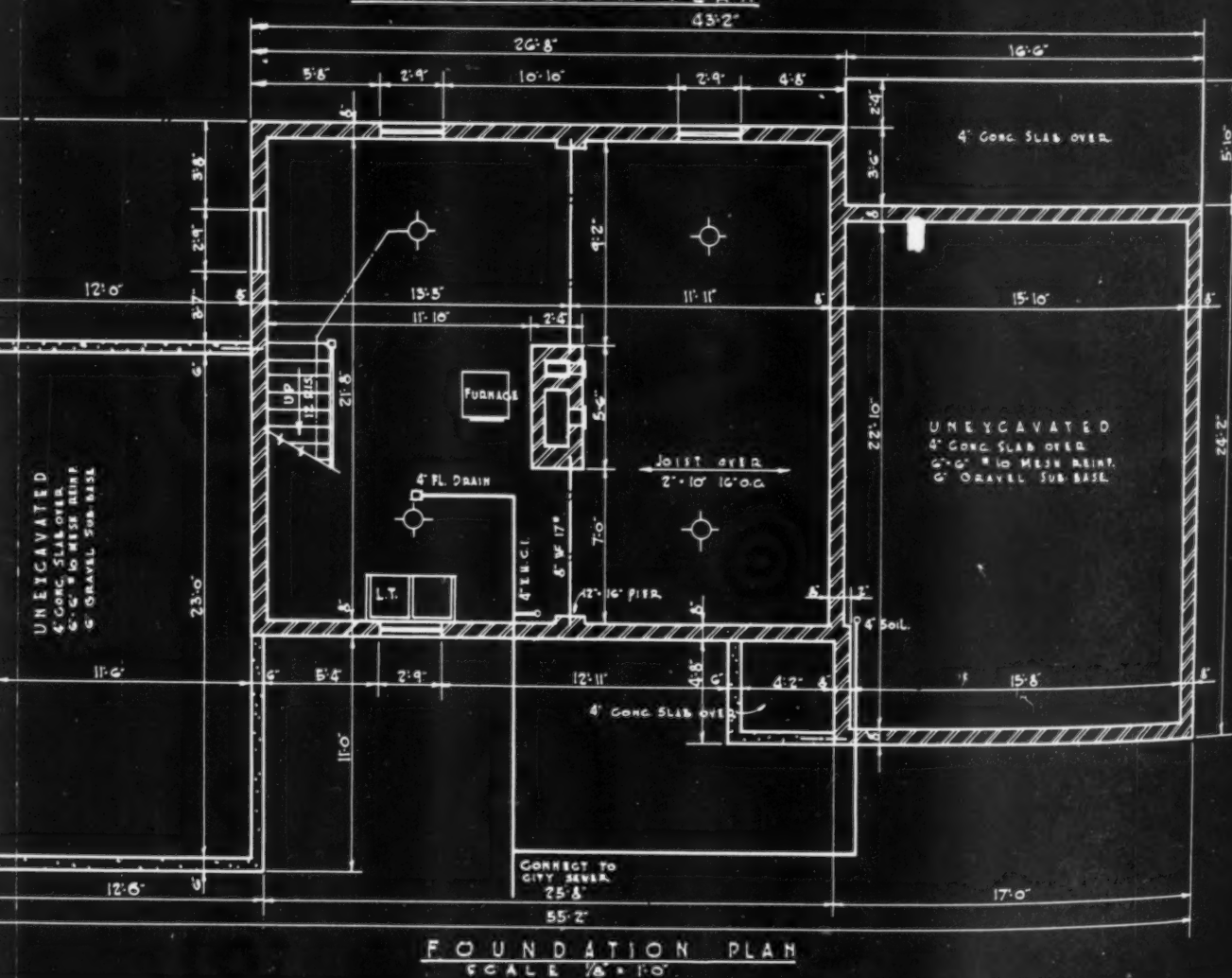


SECTION W-2
SCALE 3/4" = 1'-0"





FIRST FLOOR PLAN.



FOUNDATION PLAN
SCALE 1/8" = 1'-0"



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COST savings are obtained with flat roof construction



EARL W. SMITH, Alameda County, California, builder

Doing Something— About Low-Cost Houses

The problem of building good quality houses to sell \$1,200 to \$1,500 under market prices is a big one, met by this builder

THE big problem before home builders the country over is to build homes today which people in the low income groups can afford to buy. There was a great deal of discussion about this topic at the NAHB convention in Chicago—some builders advocated one-bedroom houses, with no garage, with painted concrete floors. The only trouble with this suggestion is that people don't want that type of home.

Earl Smith of Alameda County, Calif., is one of the builders who was seriously concerned about the problem, and who decided to do something about it. But he wasn't satisfied to build houses which could be considered substandard in any respect. He was determined to deliver houses large enough for comfortable living for average families, completely finished, beautifully painted, with garage and fireplace, on

good-sized lots with all improvements.

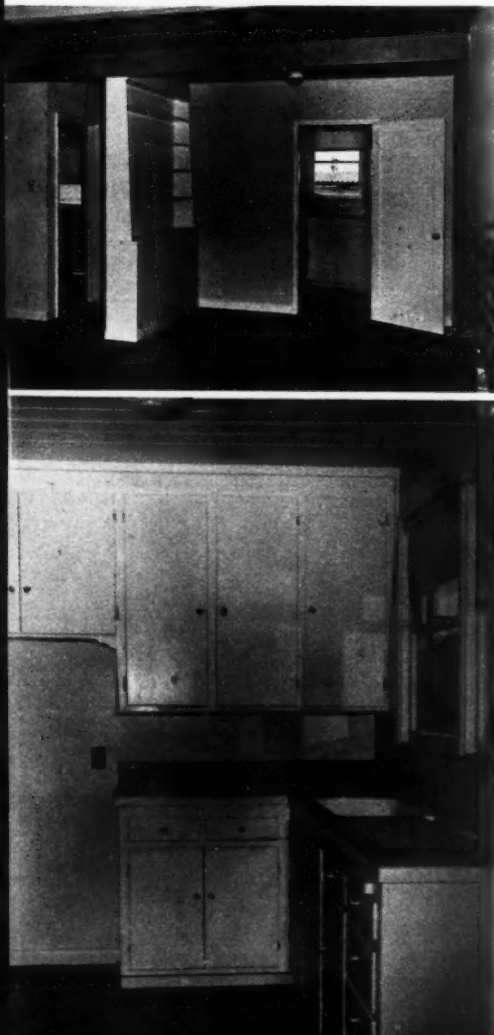
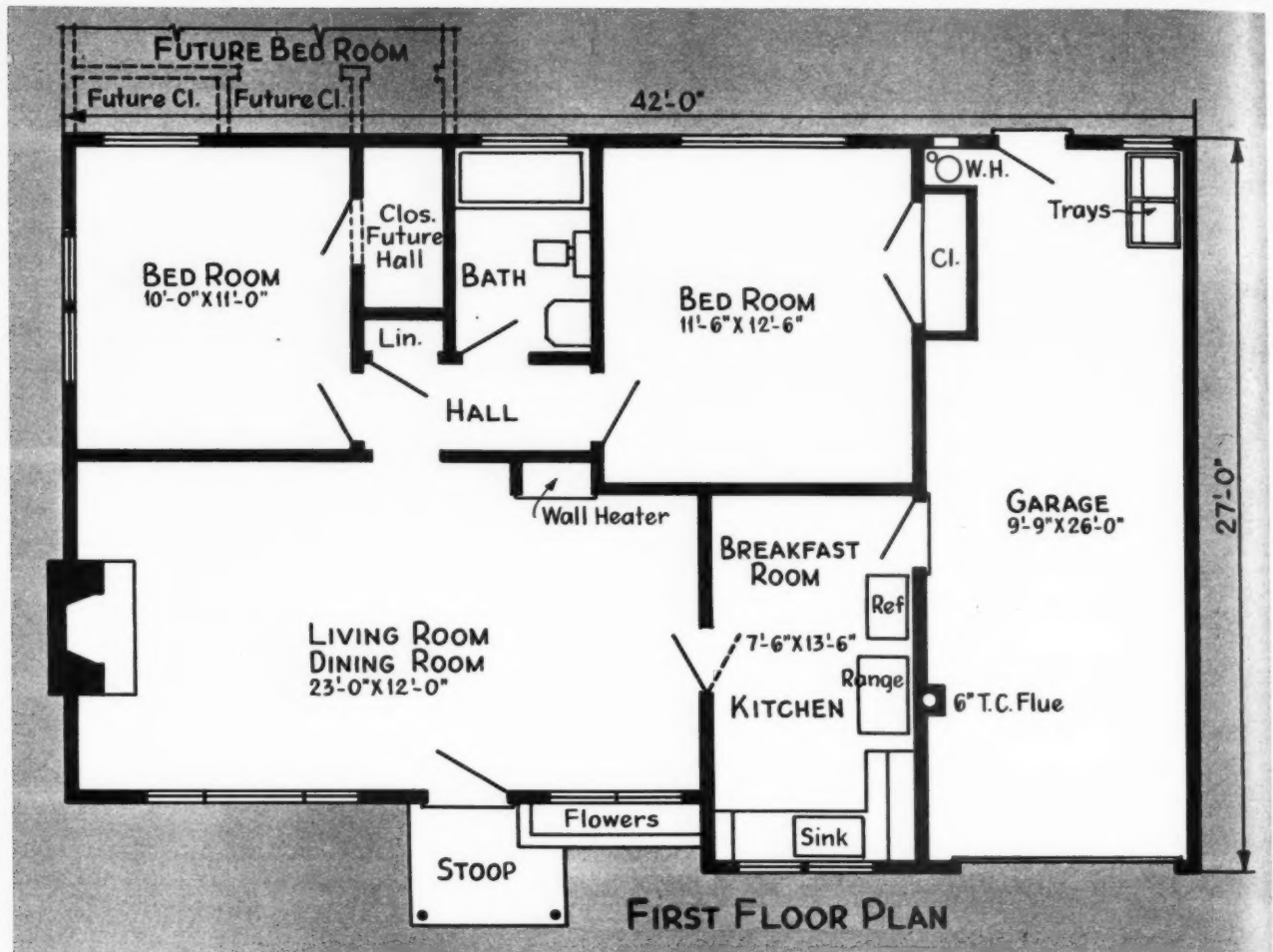
Smith, since the convention, has completed 10 such houses which sold like hot-cakes. He is now close to completion on 12 more which were sold while under construction and within two hours of the time a small advertisement appeared in the local paper. He has plans for 64 more houses in his present tract with hundreds of applicants for them, although he refuses to take any deposits on homes not started.

The public is always quick to recognize sound values. The reason why Smith's homes sell so fast is that he delivers a lot of house for \$7,300, including the fully improved lot. It is a quality house throughout, and one for which no family will have to apologize; a house which will require a minimum of upkeep; a house which can be expanded as the family grows and needs more room.

How does he do it? How does he build a good house to sell at \$1,200 to \$1,500 under the market for houses of comparable size? The answer lies mainly in the design of the house. The conventional house with a shed roof is wasteful of materials and labor. Smith knew a substantial saving could be effected by building houses with flat roofs. Furthermore, he wanted to use dry wall construction and to build on slabs.

In order to find out what public reaction would be, Smith built the first ten. He found that people were enthusiastic about the houses. They bought them not only because they represented the best values, but because they liked the modern touch. He found it is particularly popular with the young people—and, of course, most of the potential buyers in the low income group are young people.

The big problem was in the financ-



ing. The local FHA authorities liked the general construction but were doubtful about the flat roofs. However, after the authorities saw how the first ten went and got the reactions of the buyers, FHA made a commitment on the 64 which are being started now. The American Trust Co. is furnishing the money. The houses also are approved for VA loans.

The two-bedroom house which sells for \$7,300 has 890 square feet of floor space, including the corner of the garage used for laundry equipment. In addition, there is a 10x20 foot garage. The lots are 52x100 feet. Sewers, streets and sidewalks are included, as well as concrete driveways and walks for every house. Double trays for the laundry are provided in each garage.

The houses are framed in the usual way; the exteriors are Redwood lap siding 8 to 12 inches wide; the interior plaster board. Each house has a fireplace, an item which most builders of low-cost houses omit but an

item which most buyers want. Each house has some brick work, used either in flower boxes or decoratively. A wide overhang always improves the appearance of a flat roofed house; the overhangs on these houses are 30 inches in front and 24 inches on the sides and back. The combination roof and ceiling which Smith developed, offers one-third more insulation than the conventional pitched roof and plastered ceiling.

The living room of this low-cost house is impressive because of its size, attractive fireplace and beamed ceiling with stained boards. The beams are 5x8 inch. The boards are 2-inch select Douglas Fir T & G from 6 to 10 inches wide. The wide box windows have casement sash and are provided with Rollaway screens. The concrete floors in all rooms are covered with asphalt tile.

The kitchen is well-planned. All working spaces, including the range and the refrigerator, are contiguous. There is plenty of cabinet space. The sink drainboard and backsplash are ceramic tile. The kitchen is so planned that there is plenty of room for a table and chairs.

The master bedroom will easily accommodate twin beds. Both bedrooms

FLOOR PLAN above is of a house built by Smith. Typical living room, top left, has brick fireplace; kitchen, lower left, has ample cupboard space



LONG sweeping lines, low fireplace chimney give these low-cost homes charm



have roomy closets; there is a large linen closet in the hall. On some models, the closet in the master bedroom can be made into a hall at a later date, if the owner desires to add a room to the house.

There are several construction features in these houses worthy of note. All bearing walls have footings supporting them; the concrete slab is poured over the footings. Two sheets of 15-inch felt are mopped over the fill before the concrete slab is poured, so there will be no danger of water coming up through the floor. The roof is insulated by the application of 1/2-inch Celotex over the boards, 4 sheets of 15 pound felt are applied over that and gravel on top of the

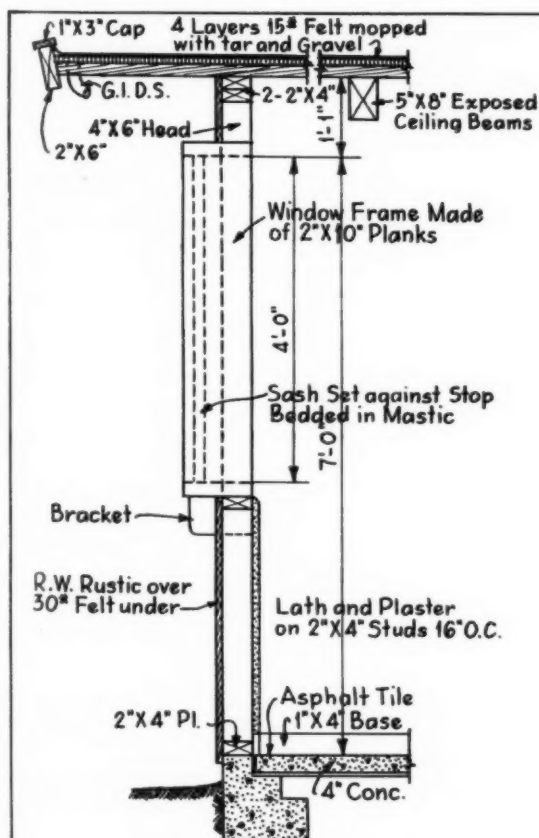
roofing. The roof is crowned 5/8 inch to prevent puddles from forming and leader pipes take the water to the downspouts.

Low-priced land is of course a necessity to low-cost housing. Smith's lots are valued at \$900 which, considering the cost of installing improvements, is very low. The subdivision is in Contra Costa County.

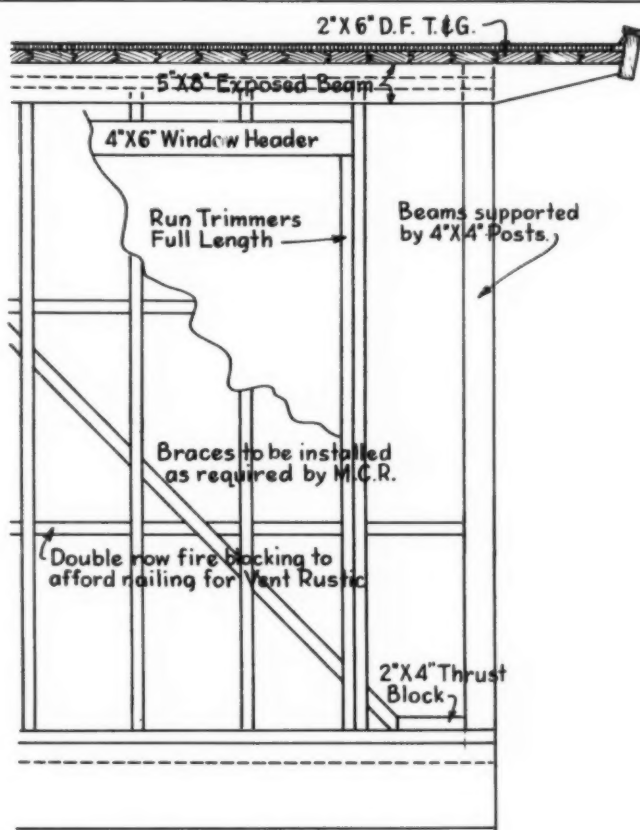
Earl Smith is chairman of the Home Builders Council of California and also president of the Associated Home Builders of Alameda County. One of his biggest satisfactions in connection with this project is that he has demonstrated the public will not fight shy of houses which are new in design, if they represent sound values.

MATERIALS USED IN LOW-COST HOUSES

USG Sheetrock
USG Textolite
Kaiser plaster board
Armstrong asphalt tile
Kohler & Kohler plumbing fixtures
Standard Sanitary plumbing fixtures
Schlage locks
Rollaway screens
Celotex insulating board
Hammel Duel furnaces
Tyleboard
Nutone door chimes



WALL SECTION AT BOX WINDOW



WALL CONSTRUCTION DETAIL



Builder Fabricates Millwork with Aid of

A FIRM of Cincinnati builders is satisfied that a shop, well equipped with power tools, is a good investment for the operative builder. Lang Brothers, in that city, not only maintains a permanent shop for turning out millwork items, but has a large investment in powered field equipment as well.

When the material supply picture is normal so that quantity purchases can be made, Myron Terrell, who manages the shop operation for the

Lang Brothers firm, estimates there will be a substantial saving in the cost of millwork items, including installation costs. While materials were in short supply, the shop did not result in actual savings over what it would have cost to buy items and do other operations at the job site. However, it did enable Lang Brothers to keep items ahead so there were fewer construction delays.

The fitting of doors is reduced to a science. There is no cutting or fitting

at the job to make a door fit the frame because the frames are built around the doors in the shop. Door and frame are shipped and installed as a unit. Even the painting is done in the shop spray booth.

Stairs are done in the same manner, risers painted and treads stained or varnished, according to the finish desired. Fireplace mantels, built-in bookshelves, colonial corner china cabinets and similar items are all completely fabricated in the shop and



MYRON TERRELL, secretary of Lang Brothers, handles operations described

POWER EQUIPMENT USED BY LANG BROTHERS

SHOP EQUIPMENT

- 1 Parks 24-inch electric planer
- 1 Parks 24-inch drum sander
- 1 Parks combination woodworker
- 2 Walker-Turner radial saws
- 2 Stanley-Carter hand routers, 1 H.P.
- 2 Sterling No. 1000 electric hand sanders
- 2 Porter Cable belt hand sanders
- 2 Craftsman tilting arbor saws
- 1 Beach power feed rip saw, 15 H.P.
- 1 Beach shaper, 5 H.P.
- 2 Black & Decker electric drills
- 1 Thor electric bench grinder
- 1 Arco air screw driver
- 1 DeVilbiss spray outfit with two guns and pressure material tanks, 7 H.P.
- 1 Wayne compressor
- 1 acetylene welding and cutting outfit
- 1 Marquette electric welding outfit
- 1 Black & Decker electric hammer

FIELD EQUIPMENT

- 5 Speedmatic K-88 electric hand saws
- 2 Stanley-Carter electric routers (hand)
- 1 Carter electric plane
- 1 Carter lock mortise machine
- 1 Rex 11-5 concrete mixer
- 1 C. M. C. 11-5 concrete mixer
- 1 C. M. C. 7-5 concrete mixer
- 1 International TD-14 bull dozer
- 1 International TD-9 bull dozer
- 1 Allis Chalmers H.D.-5 loader and dozer
- 1 Cletrac H. G. loader
- 1 Hough model H.A. loader on rubber
- 1 Jaeger mortar mixer
- 1 Bros sheepfoot roller
- 1 Bucyrus-Erie G-44 scraper
- 1 Bucyrus-Erie S-67 scraper
- 2 White WA-14 dump trucks
- 1 White WA-14 platform truck
- 1 Ford dump truck

Permanent shop and good field equipment enable Lang Brothers to manufacture and install stairs, doors and frames, mantels and cupboards as units

FITTING hinges to a door with an air screwdriver is shown at left. Note that jamb is already made and hinges attached. Workman at right is "backing out" baseboard in the shop on a jointer, eliminating the hand work usually done by the carpenter on the job



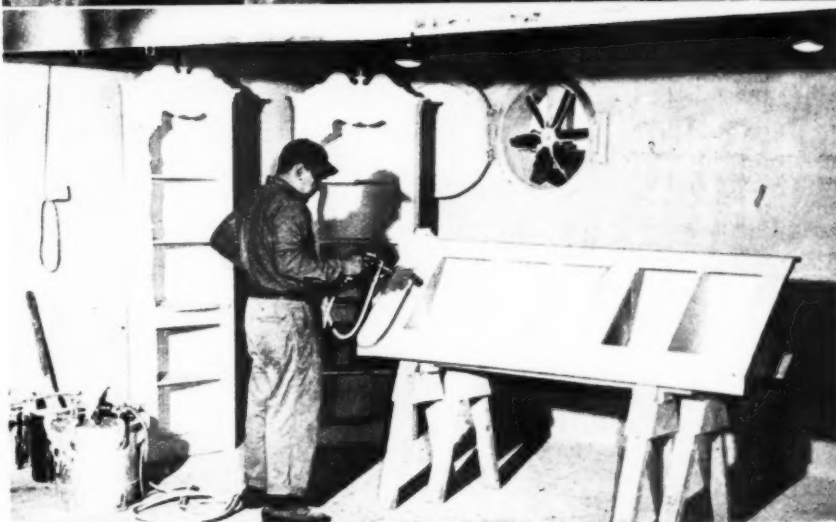
Power Tools

painted, ready to install. This method cuts installation time to a minimum.

Some simple shortcuts have been worked out. For example, all bridging used between joists is mitred and cut to length in the shop. Bundles of it are kept on hand, well ahead of the job demands.

Another operation that saves a lot of hand work is the "backing out" of baseboards. Normally, the carpenter does this on the job with a hand plane, and it is a laborious and tiresome task. A workman in the shop can run the stock through a jointer in seconds. Terrell states that the carpenters like the pre-cut bridging and baseboard because it makes their work less tiring.

The Lang Brothers firm has been an operative builder in the Greater Cincinnati area for a number of years. Normally, it builds single-family detached homes, although last year it built a series of four-family multiples. Currently, it is constructing single-family brick homes in three new subdivisions, one of which will have 100 homes. It also is completing development of a 54-home and 76-home subdivision begun last year. The organization builds homes in the middle price bracket, ranging from \$12,500 to above \$16,000.

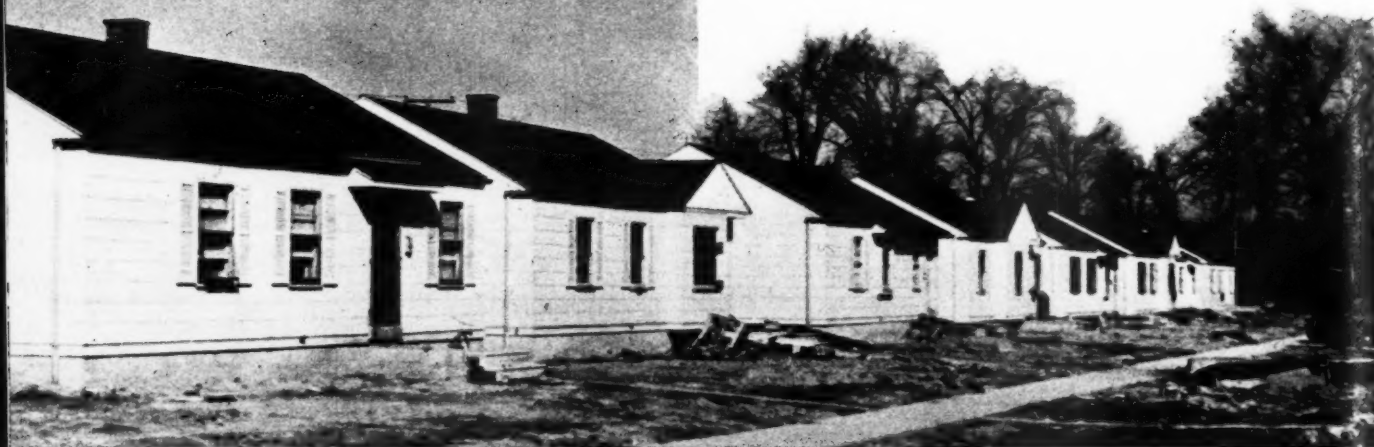


STAIRS, fireplace mantels, cupboards and the like are spray-painted in the shop



PORTION of shop, showing mantels and built-in bookshelves in process of manufacture

On-Site Fabrication



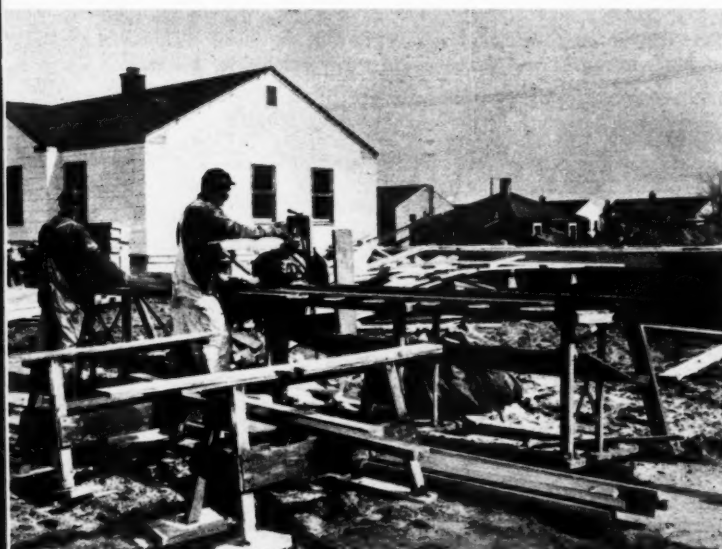
A FEW of the partially completed three-bedroom economy houses in one of the projects of H & L Builders

NUMEROUS ideas have been advanced on how to cut costs to achieve the maximum in small homes for low-income groups. Some of these ideas are good and assist in lowering costs without jeopardizing the quality of the finished product. Others suggest methods bordering on jerry building. All such moves to lower costs depend for their effectiveness on the initiative, enterprise and managerial ability of the builder to adapt them to proper use at the right time. All the short cuts ever suggested will accomplish nothing toward lowering costs unless the home building operation is properly managed and expedited to hold management and labor costs to a minimum.

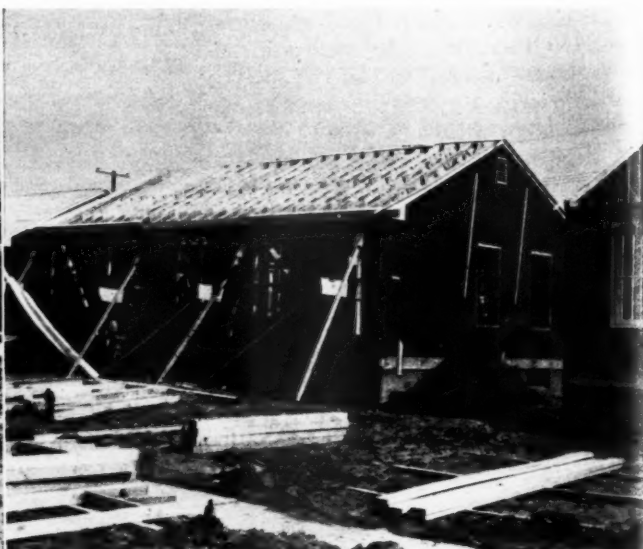
Charles Hamburger and E. L. Lieberman of H & L Builders, Detroit,

Mich., have utilized many cost-cutting techniques along with good management to produce three-bedroom houses on lots averaging 50x150 feet for \$8,990. One of the principal criticisms of low-cost housing is usually centered around the fact that lots are too small. H & L Builders determined to avoid that criticism of its operations. It is not always simple to find low priced land for low-cost houses and in many instances when it is found the lots are platted too narrow to conform to accepted standards. In one instance this firm bought a plot of ground containing 400 lots which were too narrow to take the houses and still leave ample ground area on each side. The ground was replatted into 250 lots averaging 50 feet in width.

Crews on this job are organized and trained to do one operation. Men are trained for efficiency and encouraged in their work. Assurance of steady employment plus the fact each crew has a definite job to do and can recognize accomplishments in relation to other crews tends to build good morale and loyalty. Lieberman cites the example of his carpenters as to what can be done with such managerial tactics. While many builders are complaining because carpenters and other building tradesmen are not producing a full day's work, Lieberman states emphatically that carpenters on this project are definitely giving a full day's work—for which he is deeply appreciative. This is not accomplished without attention from the "office". Men are not only assured



ENOUGH material to keep 14 men and four apprentices busy is cut on the job site with this large radial arm saw



FRAMING for openings is assembled and delivered to framing crew which nails up wall sections on the boxed foundations

Keeps Costs Down on This Project

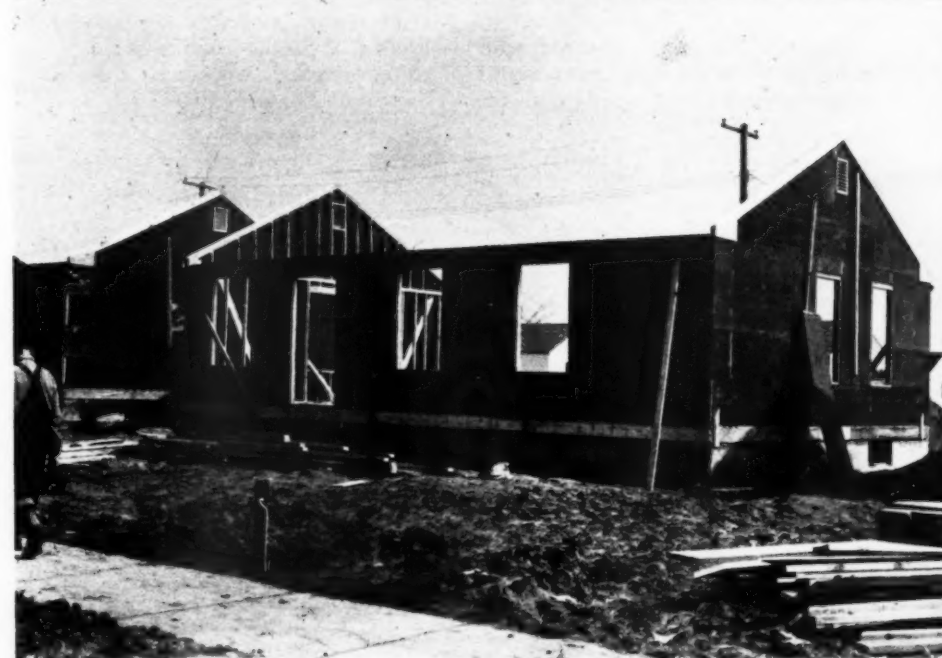
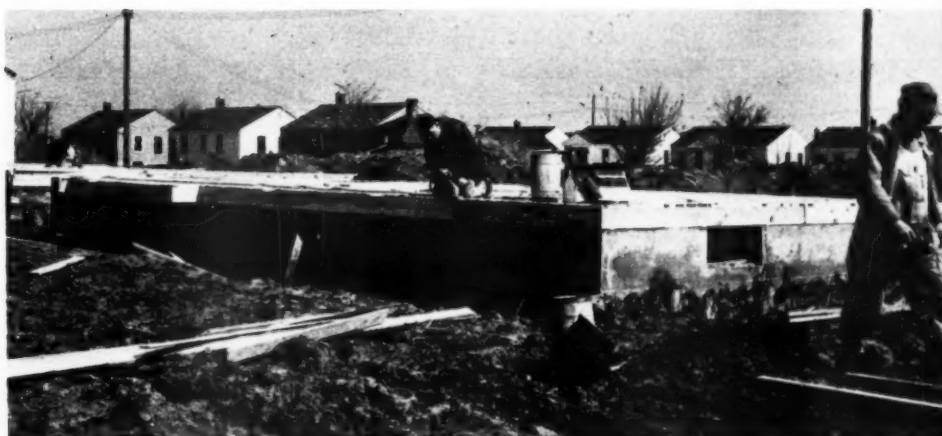
Three-bedroom houses with full basements being completed by this builder to sell for \$8,990 on 50-foot lots in high-cost Detroit area

of all materials they require, but are also given adequate tools, plus good direction. Every possible contingency is anticipated. An extra motor for the radial saw is kept on the job site at all times to make certain no time will be lost in case the motor on the saw should suddenly break down.

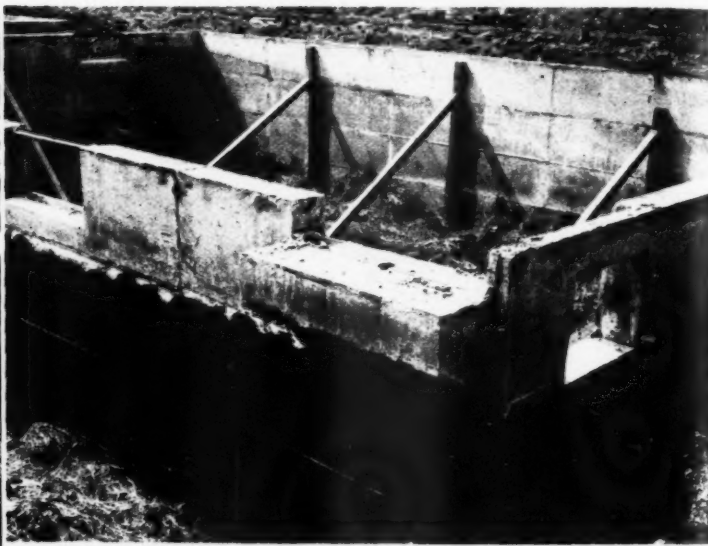
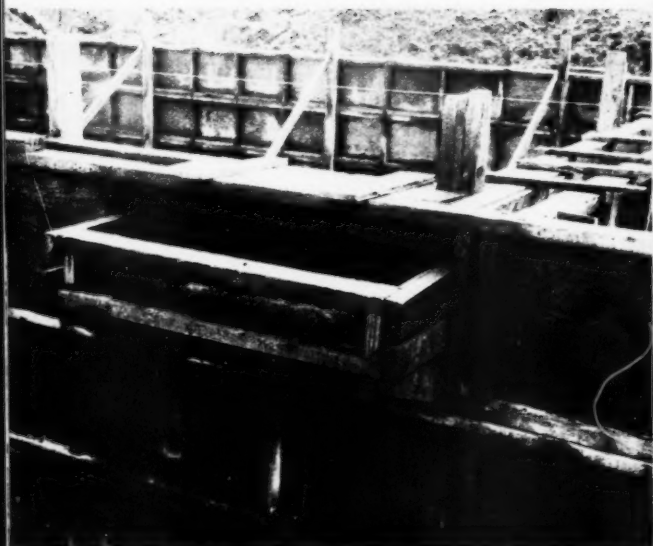
After basements are excavated foundation crews move in with six sets of forms. Form setting, pouring, removing forms and resetting them thus become a continuous operation. Just recently the firm built six new sets of forms using a plastic coated plywood. These forms further accelerate the foundation setting operation. Despite the fact that each set of forms cost about \$1,000, the firm realizes a definite saving, not only because the work can be done faster, but because these forms can be used more often than the conventional forms.

After foundations are set another crew moves in and boxes them to make ready for erection of the precut framing. One radial saw cuts enough material to keep 14 men and four apprentices busy framing. With this system these men will frame five houses every five days including erection of roof trusses, application of sheathing and roof boards. This part of the operation is also divided among special crews. Two men are busy making trusses for one house each day. Four men set trusses, put on drip caps, set window and door frames for a house a day.

In addition to the large radial saw used on the site, crews also use six powered hand saws—two small and four large models. All the frame openings are preassembled and turned over to the framing crew which assembles its work on the boxed founda-



CARPENTER crews are split up into several separate units. Top photo shows crew finishing up foundation boxing job. Framing crew is busy assembling wall sections in center photo. Bottom house is framed and sheathed, ready for erection of trusses



REAR steps for these houses are poured as part of foundation. Photo at left shows form. At right is finished step

dation. Stair stringers are cut on the radial saw—fourteen sets at a time. A small shop is operated to manufacture door jambs, trim and much of the other precision and finish material required in the houses. Many of the kitchen cabinets are made right on the job, and a few are purchased from manufacturers.

Although one basic floor plan is used for all the houses, interior walls may be moved about to vary the arrangement because roof truss construction eliminates the need for load-bearing partitions. Short cuts in time and costs on these houses start when the foundations are poured. Steel basement sash are inserted in the forms and when pouring is completed they are all set. The rear step is also poured as part of the foundation.

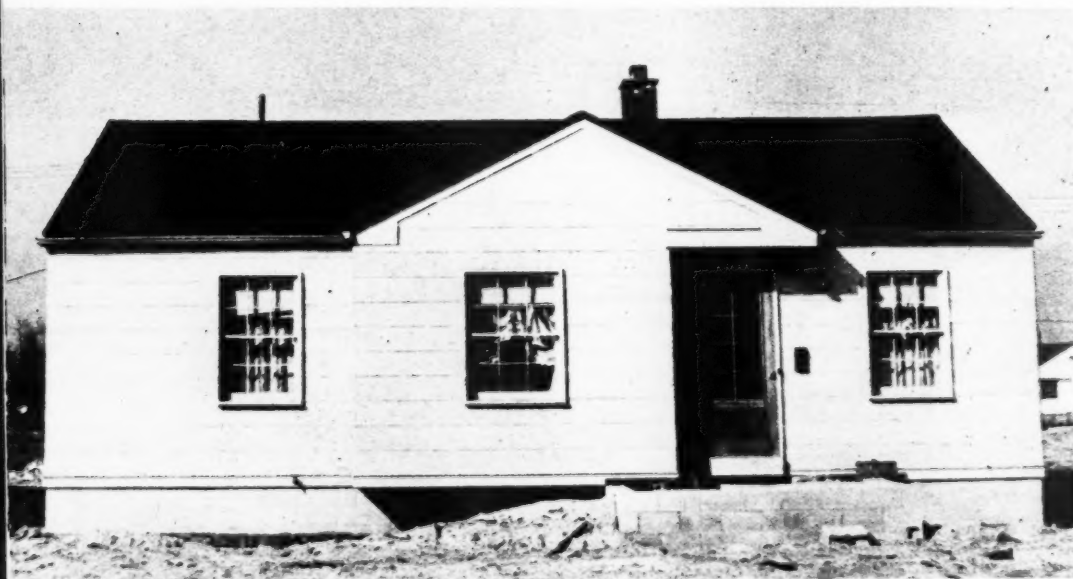
Exterior walls are covered with either bevel wood siding or asbestos cement shingles. Asphalt shingles are

used on the roofs. Ceilings are insulated. Floors are hardwood except in kitchens and bathrooms. Linoleum is used in the kitchens. Bathroom floors are tiled. Tile is also used around the bathtubs, showers and base. Interior wall and ceiling finish is gypsum board, painted. The gypsum board is applied with 1¼-inch blue-headed nails and joints are unusually well and smoothly finished.

Although these three-bedroom houses do not have dining rooms, ample kitchen area permits dining there. Each bedroom has a good-sized clothes closet and in addition there is a clothes closet and linen cabinet in the main hallway. The basement is planned with the chimney, furnace, laundry tubs, hot water heater and fruit storage closet all on one side, leaving the other half available as storage space, workshop area, or recreation room. Each H & L house

is easily identifiable because of the cut stone front steps. Lieberman states that these steps, set on a firm footing, are cheaper to buy and install than to construct forms and pour concrete steps. The rear steps, however, are poured concrete.

After being in the home building business for 30 years, Lieberman states he has learned that only with careful management and good planning can efficiency on the job be achieved. A steady pace in production is paramount with this firm. Last winter, despite extremely unfavorable weather, work on this project proceeded when at all possible. Concrete foundations were poured all winter and no sacrifice in quality was noted. It took about \$5,100 worth of straw, however, to protect the newly-poured foundations from the winter weather. All the planning and work to keep crews going is of course motivated



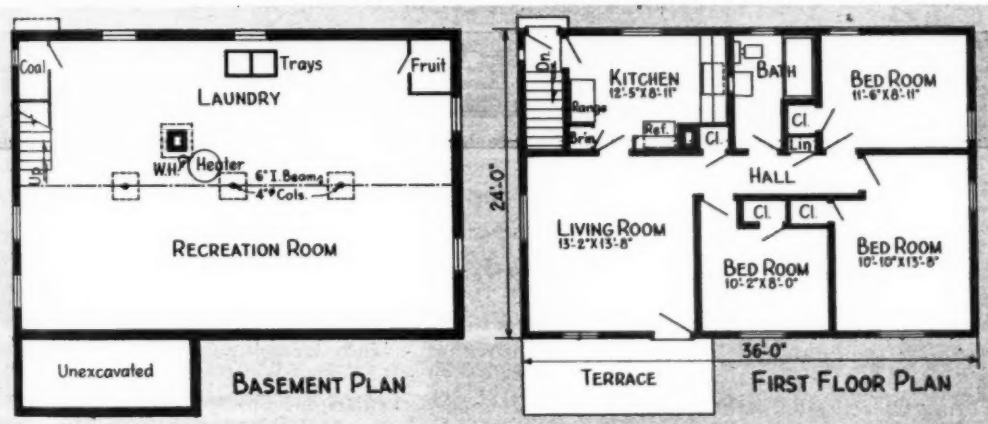
ASBESTOS cement shingles are used for exterior covering on most of the H & L houses. Foundations, which enclose a full basement, are reinforced poured concrete

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EXTERIOR elevations are varied. Although one basic plan is used, interior partitions can be shifted about because truss roof construction removes need for load-bearing walls inside

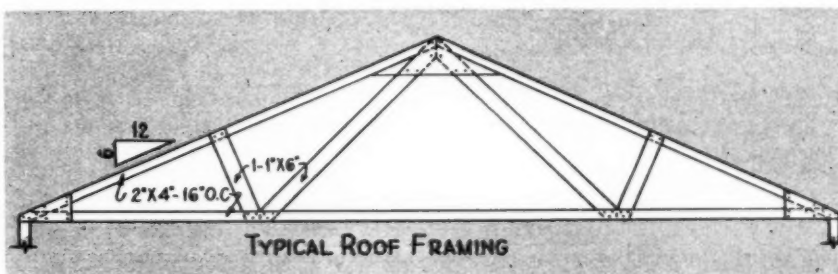


BASIC plan reveals large basement area for workshop or recreation room. Kitchen is large enough to provide limited dining area for the ordinary family

by a desire to hold costs down so these houses can be sold at a profit for \$8,990.

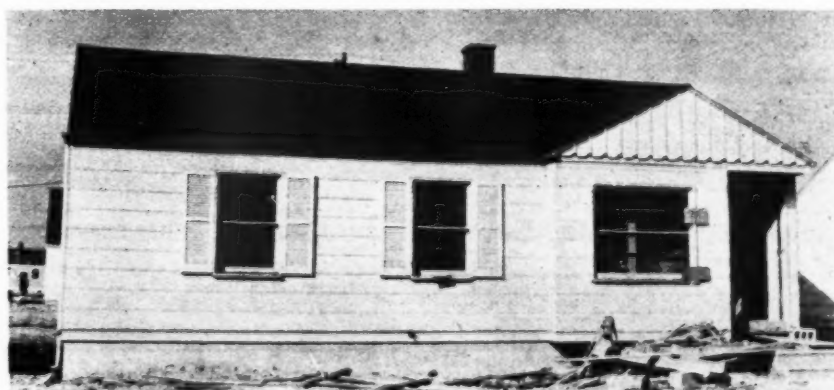
Evidence that the houses are in demand at that price and considered good purchases is the fact that several individuals who bought houses from H & L Builders, have resold them at substantial profits after living in them only a few months. This discourages Hamburger and Lieberman in their work to hold costs down, but they will not deviate from their rigid policy of working constantly to improve the operation and effect further economies for purchasers in the low cost bracket.

Currently the firm is completing 166 houses in two separate projects—77 in one and 89 in the other. Plans are already made and materials being assembled to proceed without delay in another development of several hundred of these \$8,990 houses. Quantity purchases for H & L jobs also effect some economies. Hardware and similar items are bought for 60 houses at a time and stored in orderly fashion so there is no delay or confusion in locating materials required promptly on the building site.



THIS simple truss is strong enough to stand any load requirements of FHA or building codes. Two men assemble a set of trusses for a house each day. Four men erect the roof trusses, put on drip caps, set window and door frames on one house each day

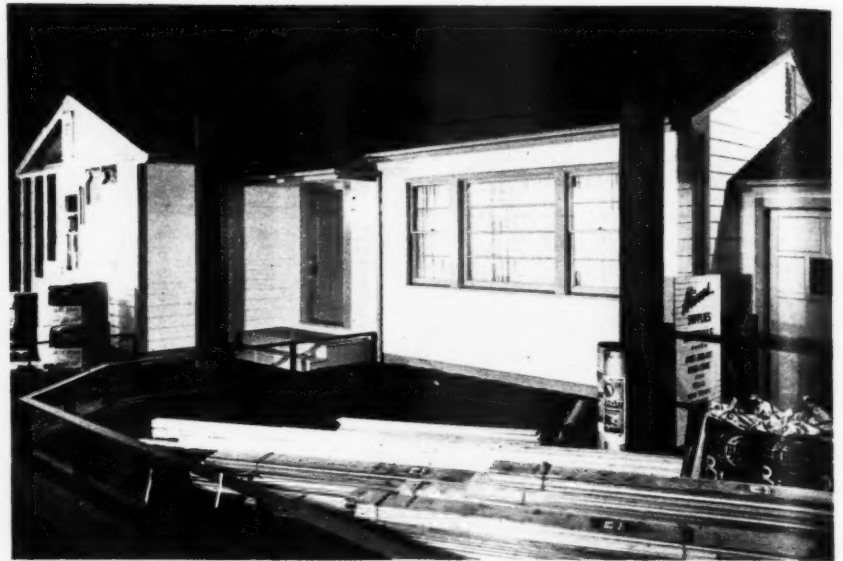
ANOTHER variation of the H & L house. Lots for these houses average 50 feet in width



Lumber Dealer Demonstrates



FLUTED architrave member frames the door, enhances attractiveness of entrance, adds Cape Cod touch. Knocker embellishes door



EXTERIOR walls of house were beveled-cedar siding painted white. Gutters were wood

HIGHLIGHT of the Chicago Home Builders' Show was the model Industry Engineered House built and exhibited by the Edward Hines Lumber Co. of Chicago. The house was erected to demonstrate to the public the practicality of using standard or modular parts in home building. During peak attendance periods, it was viewed by as many as 800 persons an hour. It aroused sufficient community interest to draw favorable editorial comment from the Chicago Tribune.

The greatest number of queries were from individual property owners, many of whom registered with the Hines Co. as definite prospects for engineered homes. By bringing the prospective owner and the builder together, the Hines Co. hopes to get many of these houses under construction in the Chicago area; thereby helping to promote the Engineered House program being sponsored jointly by the Producers' Council and the National Retail Lumber Dealers Ass'n.

To foster public acceptance and create demand for modular-planned homes, the Edward Hines Lumber Co. erected a full scale model at Chicago Home Show

The house was but part of a huge exhibit designed to educate the public to the principles of standardized building methods and materials. A panorama of posters, written in layman's language, explained the use of the module as standard measurement. Miniature models showed the symmetry of a house so constructed. A series of renderings illustrated various exteriors possible with the small floor plan from which the Home Show house was built. Modular materials and millwork used in the structure were displayed.

The visitor passed these units of the exhibit before entering the house. In the house, he received further education on construction methods and material standards advocated for engineered homes. Bedroom floors were only partially completed so joists and sub-floor-

ing could be exposed. Bedroom walls were incomplete to show the application of wallboard and insulation. The balance of the house was finished and decorated, offering suggestions on interior treatment seldom found in small homes. The use of a stained-larch wall in contrast with plain walls in the living room, and of a lively wall paper in the reception hall created an interesting decor, giving the house an air of distinction and individuality. Millwork, birch-finished kitchen cabinets and hollow core birch interior doors, finished in natural stain, were other features which added richness and warmth to this house of standardized parts. Interior wall surfaces were of U.S.G. Sheetrock except in the kitchen and bathroom where Marlite wall panels were applied.

Since the house exhibited was



VISITORS learn Engineered House is result of research by 36 building groups;

that building materials whose dimensions are multiples of 4 inches are modular;

that use of modular standard lengths of lumber saves cutting time and waste;

Industry Engineered House to the Public



BEAUTY of mantel and stained-larch wall in living room and of the birch-finished kitchen cabinets drew approval of visitors

basementless, the forced warm air heating unit was concealed in a specially built closet. Space for laundry equipment and for storage was provided by increasing the depth of the garage. On the outside beveled-cedar siding was applied in short lengths to exhibit the building paper, sheathing, and studs which comprised the exterior wall.

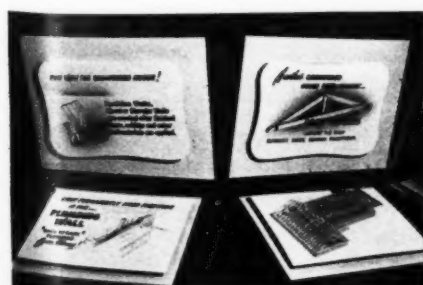
"The objective of this entire display is to get engineered houses under construction in the community," Philip Creden, advertising manager of the Hines Co., said. "After we get several units under way, we will publicize where the houses are to be built and by whom."

"This whole house is on construction methods," he continued. "The next step is more research and improvements among materials manufacturers. To better construct engineered modular houses, we need a job of research on materials, especially from the lumber standpoint."

INCOMPLETE bedrooms show construction methods used, materials from which house was fabricated



ERNST WAGENER, designer for Edward Hines Lumber Co. supervised construction of the exhibit house



that additional savings accrue through use of roof trusses, partition walls;



that U.S.G. Sheetrock and Marlite wall panels are made to modular measure;



that Hines modular millwork offers quality in workmanship and materials



CROWD shows tremendous interest in the 1948 model house of Milwaukee Home Show



SLOPING roof and one wall of glass give exterior modern aspect

Design Features Cut Model Home Building Cost

SIGNIFICANT departures from the conventional were effectively used by a Milwaukee architect, Edmund J. Schrang, in his unique design for the 1948 model home of the Milwaukee Board of Realtors' recently-staged annual home show event. Among the unusual features worked into the compact, but well-arranged five-room plan were several to enhance functional utility. While some of these were not brand new—all were directed toward greater emphasis on maximum utilization of available space, with minimum increase in cost.

Departure from the traditional in the Schrang design begins with the exterior, as a study of the accompanying sketch reveals. The roof slopes. There are no gables. One wall is entirely of glass. There is an enclosed outdoor-living space in addition to the regular living room. The master bedroom is quadrangular in shape; so is the bathroom.

The overall size of the house—47 feet, 8 inches by 31 feet—permits a reasonable spaciousness in the rooms. Some of the dimensions give an indication of the roominess built into the house. The dimensions are: Living room—nearly 19 feet by 14 feet, 6 inches, partially separated in the middle by a block wall at right angle to one end of the fireplace; master bedroom—13 feet, 6 inches by 13 feet; second bedroom—12 feet by 9 feet, 3

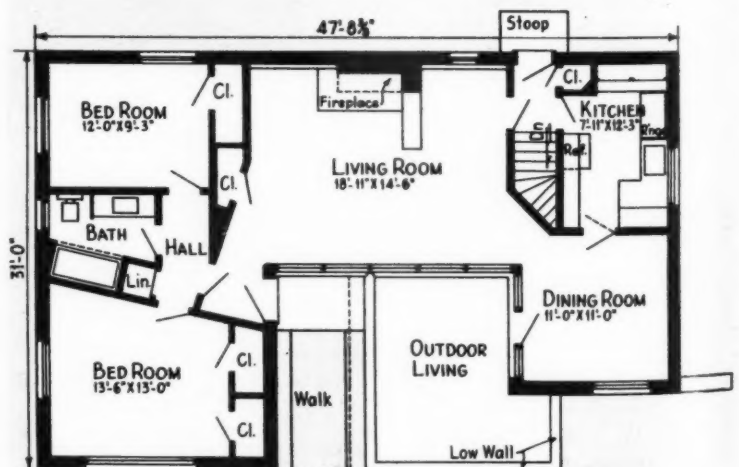
inches; dining room—11 feet square.

An apparent trend in Milwaukee toward separate dining room space is emphasized in this design with one wall, largely of glass, facing the enclosed outdoor living space.

The interior living room is so situated that, for the most part, it cannot be viewed from the street, although one wall is also entirely of glass—representing an unusual example of special window treatment. Noteworthy is the fact that of the 356 square feet of wall area in the living room, 174 square feet are glass. This is the entire east wall which is one huge

window measuring 17x10 feet. By comparison, in the average home, it was pointed out, the window area in the living room would usually be no more than about 40 square feet. The glass wall in the living room, like its counterpart in the dining room, faces the outdoor living space, where privacy is secured by the high outer wall.

The opposite wall of the living room, forming the rear wall of the house, has a fireplace and masonry wall which brings the exterior motif into the room. Entry into the living room from the outside is made either through the vestibule off the front



FIRST FLOOR PLAN

Milwaukee architect departs from traditional construction to achieve notable economies in model home

entrance, or from a small hall off the rear entrance to the home.

In the quadrangular-shaped bathroom is a washstand-dressing table with adequate drawer space for storage. By slanting the wall, space that was not needed in the bathroom, was added to the bedroom, permitting varied placement of furniture and opening the possibilities of interior decoration, like the built-in dressing table mentioned above. Further, Architect Schrang explained, "the angled wall adds general interest, since the ceiling itself follows the sloping roof line." The exterior wall of the model house are of precast lightweight concrete block. Insulation, in the form of 12x18x2-inch cellulated glass blocks, was applied directly to the inside of the block wall with asphaltic cement. The glass blocks weigh approximately one and two-thirds pounds each, and are made of the same material so successfully used during the war to keep Navy life rafts and Coast Guard anti-submarine nets afloat.

An asphaltic composition plaster was applied directly to the insulation, eliminating the necessity of furring and lathing to provide a plaster base. In the final stage, a finished gypsum plaster coat was applied, providing a hard, paintable surface. Home builder Roland J. Teske, who supervised the construction for the Milwaukee Builders' Association, builders of the model home, estimates that the use of



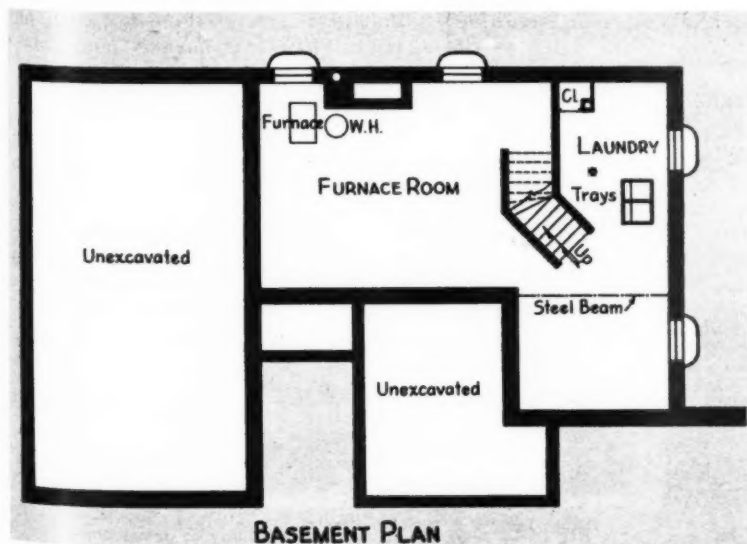
FIREPLACE and masonry wall bring the exterior motif into the interior living room

this type of wall construction saved about \$300 in the cost, as contrasted with the conventional exterior material, sheathing, studs, insulation and plaster, although the glass block insulation itself is more expensive. Two other interesting structural details are the floor construction and treatment of unexcavated portions beneath the floors. The concrete subfloor is of precast block units in plank form, 6 inches thick and 6 inches wide. A concrete topping of one-and-a-half inches thick was poured over these planks. Aside from the advantage of fireproof construction of this type of floor, it can be put into place quickly, thus eliminating the longer period required to prepare and nail rough flooring. Carpeting in the living room, dining room, bedrooms and hall areas was laid over the concrete finish of the floors.

The unexcavated portion of the basement, 31 feet by 17 feet, 9 inches,

lies roughly beneath the bedroom wing of the house. Special treatment was designed to avoid the possibility of dust and dampness by covering the ground with 4 inches of washed gravel, leaving a space of approximately one foot between the gravel and the floor proper. The entire surface was then dusted with unslaked lime, and sprinkled with water. After 24 hours, the entire surface was dusted with two bags of cement and again sprinkled with water.

The model home cost about \$15,000, including the lot, according to the builders' estimates. Through the economies in design and use of materials, it was estimated that a saving of \$2,725 was achieved over the cost of a similar-size house of completely conventional design. A breakdown of these estimated savings is of interest in view of efforts made these days to bring down building costs. This is how it was done: \$850 by use of a pitched roof design, eliminating the need for two gables which the roof of a typical house of the same size usually requires; \$135 in roofing materials and labor because a lesser roof area had to be covered with the pitched-design; \$200 in lumber costs and \$300 in labor by eliminating roof rafters and ceiling joists—again because of the pitched roof; \$290 by using the precast concrete "plank" filler instead of conventional hardwood flooring (It was figured that the wood floor would cost about \$330 more, but there was an added \$40 in topping the concrete floor with padding.); \$350 by using precast concrete block wall construction, instead of frame; and \$210 in lumber and \$390 in labor by using fewer joists because of the design.





MARK C. BANE

COLONIAL gable design was used in this house in the Eastover Garden project of Mark C. Bane

"It's Just as Easy to Build A Good Small House"

"YOU can build a good small house just as easily as you can build a good large one."

Mark C. Bane, Richmond, Va., has often made this statement. Bane's developments prove that he follows that statement closely.

In his current Eastover Gardens' 150-house project, he is providing two-bedroom, five-room houses for \$6,950 plus closing costs. With an \$850 down payment, it is possible to keep the monthly charge for the houses at \$40, including interest, principal, insurance and taxes.

Although Bane is an operative builder, he classes himself among the smaller builders. Eastover Gardens is a 150-house project, but it will probably take three years to complete it.

There are 97 houses now under construction; 27 are nearly finished.

The ability to turn out a well-tailored small house at less than \$7,000 is not due to mass-production fabrication methods at Eastover Gardens. It is due to careful planning, canny buying, a sound knowledge of the community and its growth trends.

Bane marked the industrial expansion that was taking place in Richmond—foresaw a market for low-cost homes in the eastern section of the city, and acquired a large tract of relatively level land suitable for development.

A number of things in Bane's development show extra value to the prospective buyer. For example, he uses two more yards of concrete than

required in the specifications for footings. He uses 6x6-inch sills where it is permissible to use 4x6's. Floors are either clear or select, although the specifications call for common. The houses not only have copper plumbing throughout, but copper piping is used to connect the house with the mains.

All doors and windows are metal weatherstripped. The ceilings are insulated with 4 inches of mineral wool. Gutters and leaders are of galvanized sheet metal.

Interiors of Eastover Gardens' houses have well-finished millwork and cabinet work. Interior woodwork and trim receives three full coats of paint. Floors are smoothly sanded and filled. The exteriors, too, receive three full coats of paint in Bane's project.



L-SHAPED design with the L section facing back of lot



HIP ROOF removes chance for monotony in development



NEWLY completed \$6,950 houses at Eastover Gardens are on large lots; houses are well-spaced

Careful planning enables builder to sell five-room units for less than \$7,000

Bane also uses two tons of flagstone, in paving the approaches to homes in Eastover Gardens. These will add to the attractiveness when lawns have been developed.

Lots are good sized, ranging from a minimum of 60x130 feet to a maximum of 68x150 feet. The houses are set well back from the street and building lines are staggered to break up the groupings.

The same floor plan is used in all the houses—an L-shaped plan which Bane has used for several years. At present, he is studying a way to revise the plans to permit the addition of a linen closet and coat closet.

Any monotony in appearance is forestalled by the use of ten different elevations and exterior changes—a large number for a development in this price range. Most houses have gable roofs, but there is one hip-roof design included for further variation. Rising material costs have caused Bane to suspend construction of additional units of the hip-roof design, but several already have been finished in the earlier development.

Footings are of poured concrete, with brick foundations to raise the houses above ground elevation. Grills in the foundation ventilate the space beneath the houses to prevent dampness. There are no basements. Exteriors are of weather boarding,

red cedar shingles, asbestos shingles or combinations of these materials. Roofing is 210-pound asphalt shingles.

The first group of 27 houses, nearly completed, have plastered walls, but dry wall construction is being used in the second group. Walls are papered, as are the ceilings. Bane has had the inside of closets papered to match the wall paper in the bedrooms. This has proved an attractive feature.

Heat for each house is provided by oil-burning furnaces. An automatic oil-burning water heater is provided in each kitchen.

Although small, the kitchens are well-arranged and fully equipped with custom-built cabinets, a cabinet sink, electric range and refrigerator.

Bathrooms are attractively finished with plastic-surfaced wall panels and chromium accessories. Bathroom floors are linoleum.

Bane is well known among builders nationally, as well as in Richmond, because of his activity in the National Association of Home Builders. He is at present the national director from the Richmond association, having served since 1946. His interest in the Richmond association and NAHB is just as intense as his interest in the homes he is building to meet the demand for economy housing with a high quality product.



PLAN A shows how every inch is utilized



PLAN B is a variation of plan A. Compact and efficient arrangements were used in project's kitchens and bathrooms



ANOTHER exterior variation with L section to the front

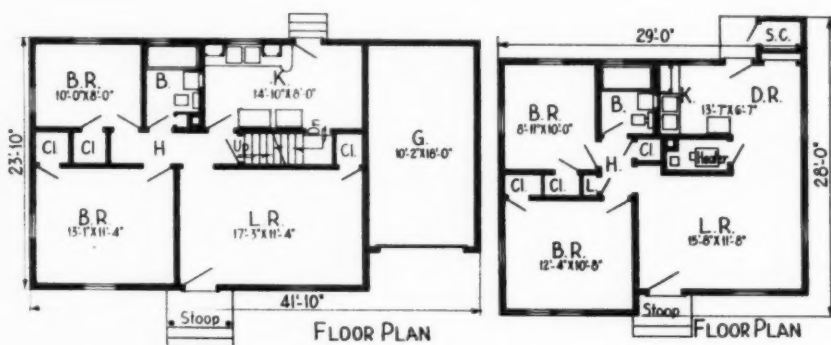
MATERIALS AND EQUIPMENT USED AT EASTOVER GARDENS

- Johns-Manville asphalt shingles
- U. S. Gypsum Co. Sheetrock (in dry-wall construction)
- Rockwool or Gold Bond insulation
- Standard Sanitary bathroom fixtures
- Marlite wall panels in bathrooms
- Coleman automatic oil-burning floor furnace
- Coleman automatic oil-burning hot water heater
- Frigidaire electric range
- Frigidaire electric refrigerator

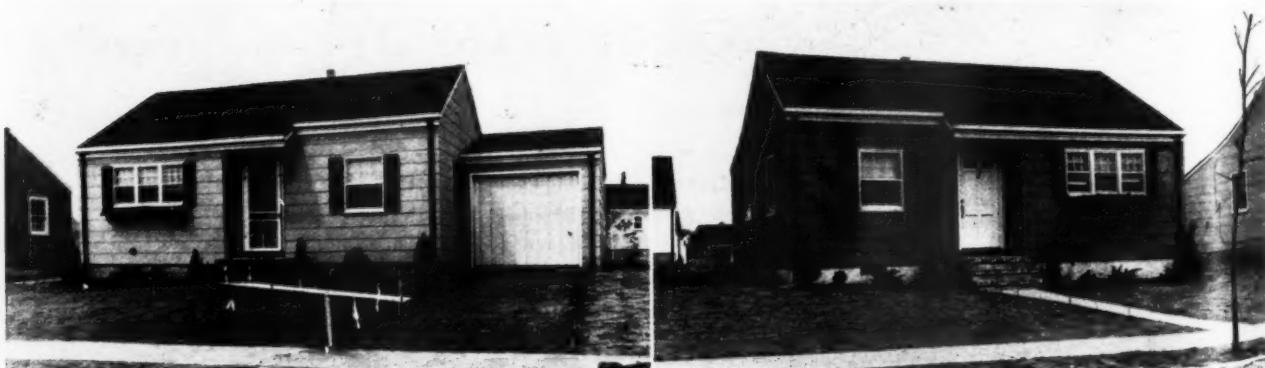
Setting the Pace in a High Cost Area with Economy Houses



BUILDER does precutting on the site with this DeWalt radial saw. Lumber is delivered in "upside down load" described in the February issue of *American Builder*. Saw is set up between two loads and is moved for each two houses



FLOOR plans of two houses in Interstate Housing Corp. project illustrate compact arrangement. Plan of house with garage, left; without garage, right



HOUSE with basement and garage sells for \$9,050; house, right, without basement sells for \$7,650

SOUNDLY constructed two-bedroom houses are being built by Interstate Housing Corp., South Bound Brook, N. J., for \$7,650.

Fully insulated, with automatic heat, the houses are located in the Alvin Manor subdivision about 35 miles from New York City, close to industrial areas surrounding Jersey City and Newark.

The units are small, but Peter J. Longarzo, the builder and vice president of Interstate Housing Corp., has worked out a design that efficiently utilizes the living space available. Longarzo is a registered architect, as well as a builder.

Alvin Manor was started in 1947, and 73 homes were finished last year in a slightly higher price range. In 1948, a new design was prepared and construction started on a smaller house to meet the demand for low-cost homes without "stripping" the houses of too many of the modern features that today's home buyer desires. From 60 to 70 houses will be finished in the project this year.

The \$7,650 basic house has no basement or garage. It does have two bedrooms, comfortably-sized living room with adjacent dining area convenient to the kitchen. Outside dimensions are 24x29 feet. A base-

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MOST of these low-cost units on 55-foot lots sell for \$8,350

ment or a garage will be added for an extra \$700.

The subdivision is laid out with curvilinear streets. Exterior treatment is varied to avoid monotony often characteristic of low-cost developments. Individual lots are 55x110 feet. Roadways are 30 feet wide, paved and curbed. Sidewalks, storm and sanitary sewers are provided.

Earlier homes in Alvin Manor started at \$8,750 and ranged up to \$9,600. They also have two bedrooms, and, in addition, have unfinished second floors where another room or two can be completed at a later date. The medium-priced house is larger, measuring about 31x24 feet.

Construction details and the materials and equipment used in both price ranges are the same. Foundations are of cinder block masonry, waterproofed. Sidewalls have wood sheathing and asbestos cement shingles for exterior finish. Roofing is asphalt strip shingle. Two inches of mineral wool, semi-blanket insulation is used in sidewalls and ceilings. The houses have oak floors.

Interior walls and ceilings are dry-wall construction, papered. Ceilings are painted. Linoleum is used on the kitchen and bathroom floors with metal tile on bathroom walls.

Heat is furnished by automatic, gas-fired, forced warm air furnaces. Copper tubing is used for interior plumbing, and copper service piping connects the houses with the mains.

Kitchen cabinets are built on the job and are carefully finished. Some of the houses have built-in china closets, also built on the job. The kitchen is equipped with cabinet sink and gas range. Hot water heater is automatic, gas-fired, 20-gallon capacity.

Longarzo relies on power equipment to help keep construction costs down. He also uses a time-saving system to handle lumber on the job. His materials suppliers deliver loads so arranged that they can be used from the top of the pile down through to the bottom without sorting.

This method of "upside down loading" was described in the February issue of *American Builder*. This story discussed the operations of the Nettleton Timber Co., whom Longarzo patronizes.

Materials are ordered for two houses at a time, with the loads delivered close to both foundations. A portable radial saw is set up so framing can be cut on the job for both houses. When the two houses are finished, the saw is moved to the site of



PETER J. LONGARZO, architect and builder, is president of Interstate Housing Corp.



ANOTHER model in the Alvin Manor subdivision. This house sells for \$8,750

the next houses under construction.

Construction crews move from house to house as required so that work is provided continuously for the various crews. Rapid construction and avoidance of costly delays aid Longarzo in keeping the sales price low on Alvin Manor homes.

MATERIALS AND EQUIPMENT USED AT ALVIN MANOR

- Johns-Manville asphalt strip shingles
- Johns-Manville batt insulation
- Johns-Manville asbestos cement shingles
- Superfex gas-fired furnace
- Wellbilt gas range
- Standard Sanitary bathroom fixtures
- U.S. Gypsum Sheetrock, recessed edge
- Rheem hot water heater
- DeWalt radial arm saw
- Skilsaw powered handsaws



HOUSE at left sells for \$9,600. House, adjacent, without garage is priced at \$8,750

Engineered Ho

Developments in materials and techniques for modern lighting permit much greater versatility in effects and efficiency that may be achieved. Here are practical suggestions on interior lighting for today's houses



Modern Lighting in a Modern Home

By O. D. Westerberg

Electrical Engineering Department, Northwestern University

THE lighting treatment of this house of modest size in the medium-price range illustrates the possibilities of using new lighting devices and techniques. This planned modern version of residential lighting is a logical and economical solution to a problem which confronts contractors and builders. It was planned to give a family daytime lighting in evening living. Nature provides an abundance of daylight which man strives to duplicate indoors. With the recent development of filament and fluorescent sources, which provide greater amounts of light at no increase in power costs, daylight may be matched by electric light.

The pattern of lighting for this specific house is appropriate and realistic. It gives striking emphasis to utility and specific lighting requirements of diversified family needs. It is evident that the public is looking for something different, new and unique, whether it be lighting effects, furniture or cars. Buyers are

convinced today that good planned lighting can add charm and additional services to their mode of living.

The interior lighting of this home was designed to give full benefit to the use of long fluorescent tubes and small filament sources. The use of fluorescent tubes is best since all dimensions can be kept to a minimum and still allow sufficient space between tubes and draperies. This aids materially in building up the over-all lighting intensity in the room. The absence of heavy, ornate center fixtures and wall brackets helps give a spacious feeling to all rooms. Long narrow lighting sources and circular spots should be in proper scale, harmony and refinement of detail for the best result.

Unobtrusive lighting is a natural part of home environment. Lighted valances or spots over seating areas furnish illumination that is a practical innovation for new or old houses. Through balanced placement in the room, the valances will illuminate

sufficiently large areas of draperies and ceiling to provide an adequate and restful balance to light from portable tables and floor lamps. Obviously the illuminated valances accent window and fireplace treatment.

Planned Lighting

Today, lighting is an important consideration while the design of the home is still in the blueprint stage. The rooms of the home are expressions of the mode of living, activities and decorative tastes of individuals and families.

Not so many years ago, when home owners and designers considered the interior decoration of a home, the rooms were designed as to color schemes, rug materials and furniture, with little or no thought about lighting effects. The result was that fixtures were an afterthought. They were hung on outlets placed in the centers of rooms with no consideration of usefulness or appropriateness. Today's home requires a well-planned

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House Construction Part II

ELECTRIC SERVICE

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lighting design that will satisfy all household functions. Particular attention must, therefore, be given to the needs of each interior and the purposes for which illumination is needed. One type of light source, whether incandescent or fluorescent, can not adequately satisfy the requirements of every household task.

Quantity and Quality Necessary

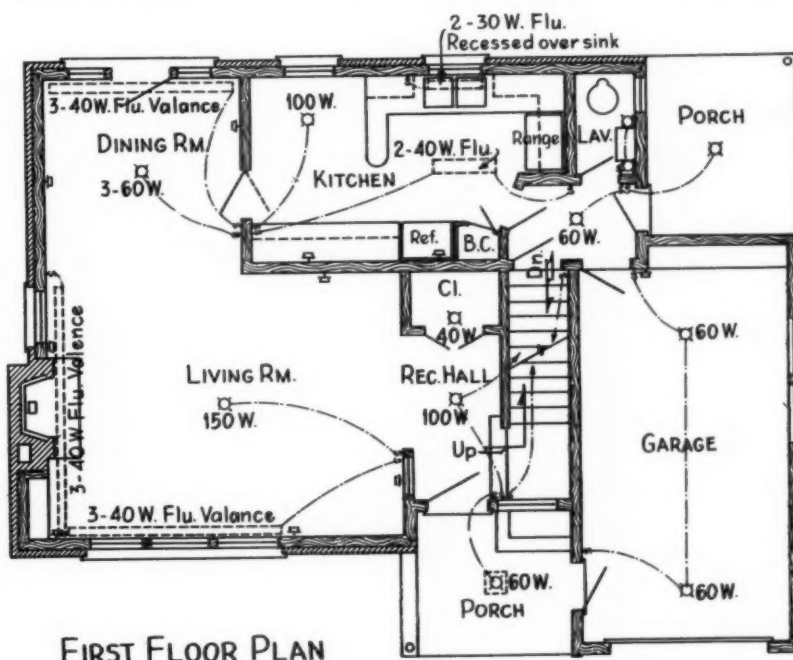
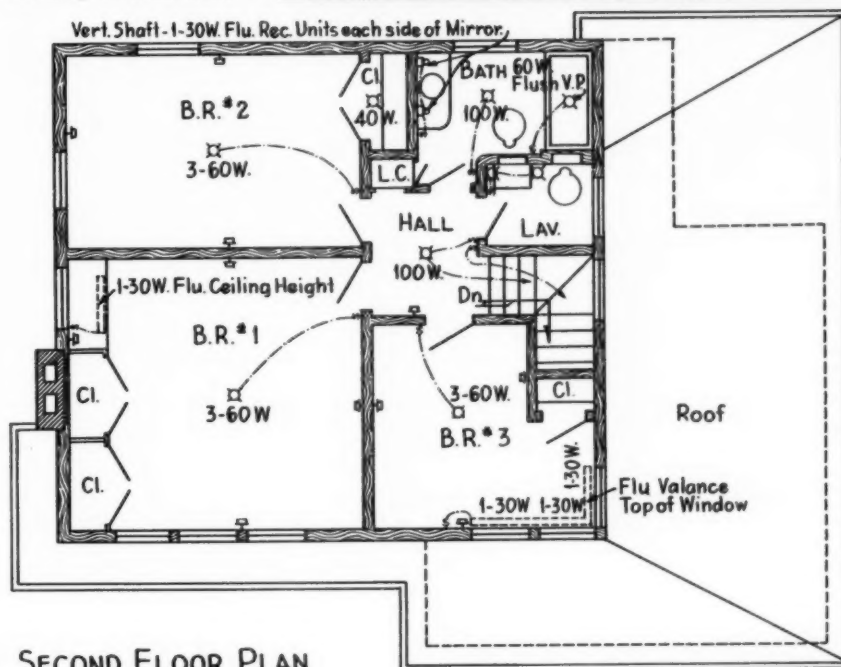
The placement of lighting sources where particular functions are being performed may satisfy a lighting problem in quantity but not quality. Provisions should be made for flexible schemes to prevent excessive contrasts of brightness for good visibility and eye comfort. Good home lighting is made of two essential elements. The first and primary purpose is to provide illumination for difficult-seeing tasks, many of which require the same quantity and quality as tasks performed in industry. The creation of many new designs to use fluorescent and incandescent sources of various sizes and shapes has provided more graceful luminaries. The larger dimensions required for fluorescent tubes have improved lighting distribution and lowered fixture brightness with more than double the useful amount of light.

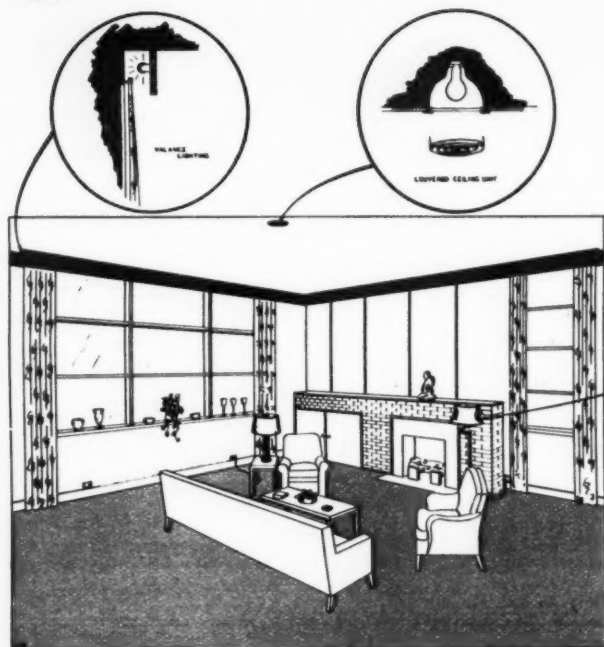
Lighting as a Medium of Design

The use of lighting in obtaining decorative effects is unlimited. Architects and designers are realizing the value of lighting as a medium of design and are using it not only for utility purposes but also for decorative purposes. The builder and home owner must also realize that lighting can be one of the greatest aids in beautifying any home and making it more saleable.

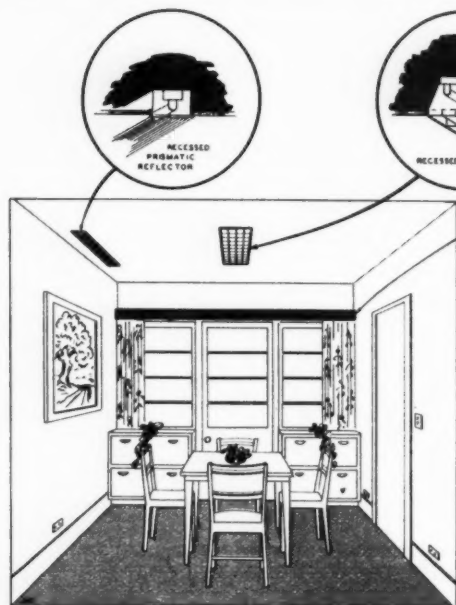
There are two kinds of lighting that must be considered in the home, natural lighting and artificial lighting. Natural lighting is obtained if consideration is given to wall openings and their specific treatment. Artificial lighting, however, presents more diverse and complex problems because of man's attempt to simulate nature's conditions. Therefore, before artificial lighting can fulfill all its functions, it should be designed as definitely as other structural features in the home. Unfortunately, it is the more or less common practice to

THIS is a rendering of the Anicka Blueprint House which has been engineered for adequate modern lighting. It is the same house used in Part I of the American Builder series on heating installations



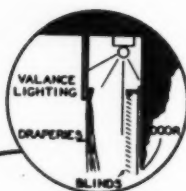
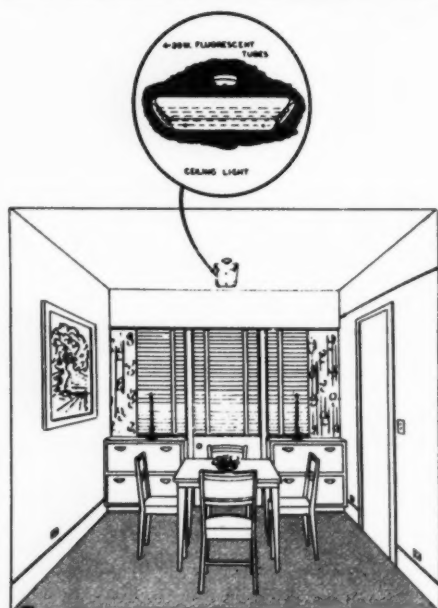


LIVING room: The manner of lighting will determine how well the room is suited to its uses. Valance lighting makes a room bright and attractive. A valance runs the width of front window, over fireplace and side window, making the area a focal point in this arrangement. The valance is a "closed-top" type due to height of windows. A valance of this type may be made of lightweight wood or wallboard 8 to 10 inches wide, mounted 6 to 8 inches from the wall depending on the drapery arrangement. At night, fluorescent tubes behind valance light up drapes and fireplace. This perimeter lighting is supplemented by a recessed downlight



valances or in coves to provide contrast and dramatize the various sections of rooms. Such lighting is a versatile medium; decoratively, emotionally and functionally. It can establish attitude, environment and activity as easily as out-of-door daylight. The cost and form varies with

DINING room A (recessed louver): Two lighting systems for dining room provide a desired balance between general and local lighting. The two systems create extended luminous areas, free of spots or bright light sources, in a manner simulating natural daylight. The narrow dimension of this room eliminates the use of center recessed spots for illuminating an extensible dining table. A general lighting system using an elongated light source, as fluorescent, gives the smoothness of light distribution which is functionally decorative and architecturally appropriate. The carefully engineered design of this installation eliminates unpleasant brightnesses by incorporating direct overhead sources with slender valances extended below the ceiling line low enough to cast some light on the ceiling and to avoid an otherwise dark area on the upper wall and ceiling. A method for lighting pictures or drapery is the use of a directional recessed prismatic reflector



the home and family. Many of the suggestions indicated in the accompanying drawing may be installed very economically. The individual taste and pocketbook will determine the extent of acceptance.

Perimeter Lighting

Ideally, illumination should come

DINING room B (surface unit): The two dining rooms differ in lighting design. Lighted valances above the door opening and windows emphasize window treatment. In each room design, the large luminous area at the end of the dining room creates a balance with the living room. Depth of valance in this design is governed by the height of the space between the top of windows and ceiling. With the valance top closed, the full quantity of light will flood the draperies and be reflected into the room. Fluorescent tubes, one inch or less in diameter, are best since the distance from valance to wall may be kept to 8 inches and still provide an uninterrupted flow of light. Separate switch control of the valance lighting and center luminaire is essential for flexibility. The center luminaire may be either fluorescent or incandescent. The picture is lighted from a surface mounted unit

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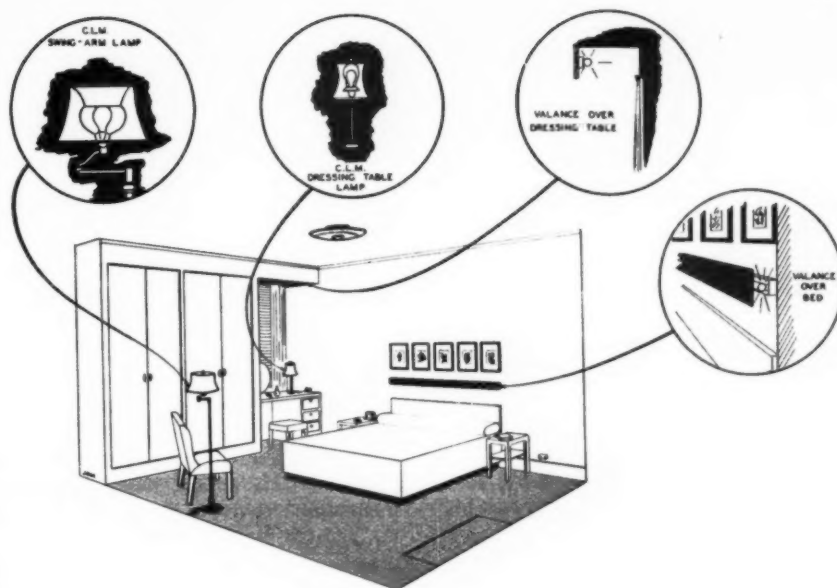
Drawings illustrate how it is possible to solve functionally and decoratively lighting problems in a flexible manner, tailored to visual requirements

from the perimeter of rooms. An exception would be dining areas where high intensities are desired on the center of the table for eating purposes. People live along the perimeter of rooms. Most chairs, divans, radios, sinks, tubs, the refrigerator and beds are placed along walls. Lighting should, therefore, be placed to provide illumination for these areas. A center ceiling fixture would do a good job of lighting the back of books and cause shadows on working surfaces. The accompanying illustrations picture the practicability of perimeter lighting. Note the use of valances of several forms, downlights, and recessed luminous panels to provide good illumination over useful working areas.

Certified Lamp Makers' Lamps

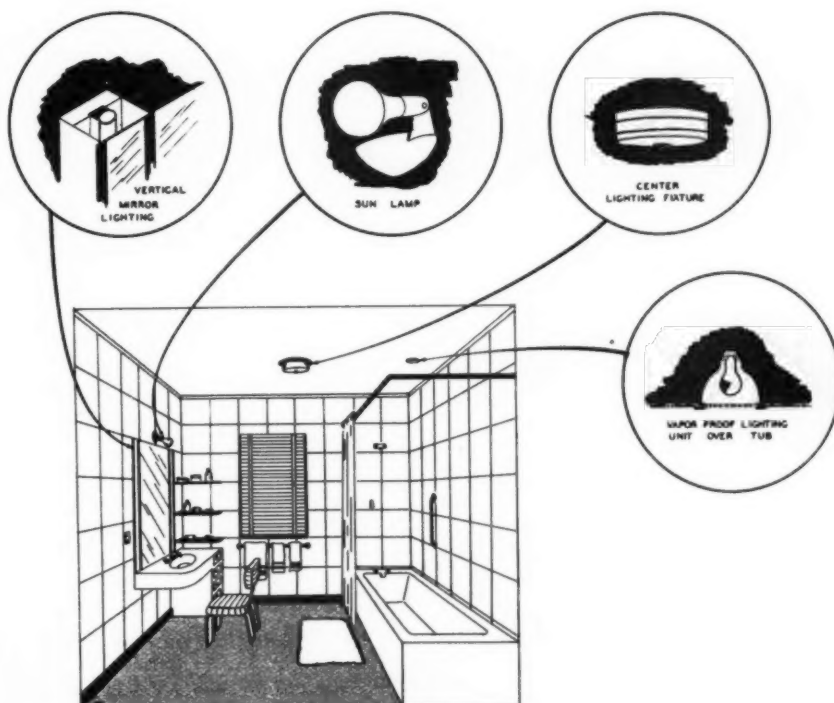
Table and floor lamps that carry the "Certified Lamp" tag are often known as "Lamps With A Purpose". They are engineered lamps of good quality manufacture with good light, beauty and design. These lamps are designed to use the two-filament bulb to give a choice of lighting levels, either high or low. The high level of illumination is for reading, writing and seeing, and the lower intensity for conversation, radio or television lighting. These engineered lamps may be selected to serve both decoratively and functionally, adding to the attractiveness of any room. They provide higher average footcandles of light than previously obtainable with the same wattage bulbs. The "certified" tag is a guarantee as to manufacture, and certifies that the lamp has been tested and found to comply with specifications requiring definite and authoritative standards of sound construction, electrical safety and lighting performance. This C.L.M. tag thus becomes an important aid to the purchaser in selecting lamps.

Next month's article in this series on Engineered House Construction will offer suggestions on lighting the kitchen, laundry and recreation room in this same Anicka Blueprint House.



BEDROOM: A "reading-in-bed" light should not create undue eyestrain. A good reading light can easily be provided by a long fluorescent tube behind a valance or in a reflector mounted on the wall above the headboard. Height of reflector above mattress should be approximately 24 inches. Bed lamps on tables at both sides of bed or a pin-up type lamp over the headboard are other solutions. The valance design will provide soft, pleasant illumination and eliminate the blinding contrast of bright spots in a dark interior. Night lights located in convenient outlets are desirable in nurseries and sickrooms.

Recessed dressing table niche lends itself to overhead concealed illumination. A small soft white fluorescent tube is installed behind an overhead cornice. A silver-bowl bulb could also be used for this lighting effect. This lighting is combined with "certified" boudoir lamps for the best results. General illumination for the bedroom is provided by an enlarged "bent" glass ceiling unit. Without this general lighting, the lounge chair lamp, the dressing-table lighting combination, and other lamps would stand out as bright areas of light, destroying the effect of a background of soft lighting



BATHROOM: Recessed vertical fluorescent units are good in this bathroom because the mirror is mounted flush with the wall. Where cabinets cause the mirror to extend from the wall an inch or more, surface mounted units on each side or around the mirror are more appropriate. An RS sunlamp controlled by a wall switch

provides sunrays. Vapor proof ceiling fixtures are installed in tub and shower areas. They may be recessed or surface mounted units matching a larger center ceiling unit. Unless the bathroom is less than 60 square feet, a center ceiling fixture should be used. A night light is an inexpensive safety measure

HEATING

As It Applies To the Builder and Architect

by S. Konzo,

Professor of Mechanical Engineering, University of Illinois

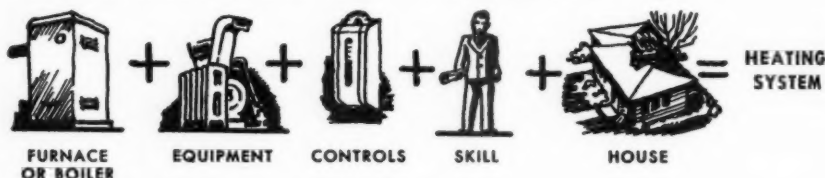
DEATH and taxes are inevitable. And so also are fuel bills. After the experience of the past winter when gas supplies were short, fuel oil was rationed, and coal was an expensive commodity, many prospective home owners have been indulging in wishful thinking and have written for information concerning the future of electrical heating, energy from atomic sources, the heat pump, and many other devices. Under certain conditions and with low power rates, electrical heating and the heat pump may be feasible. Very little is known of atomic energy or its immediate application. By and large, however, the majority of the new homes being built and the old homes being remodeled will be heated with fuels that are currently available. There is nothing wrong with them as far as performance is concerned. There is much that can be done, however, especially by the builder and the architect, to insure that the fuel burned is used efficiently and sparingly. The builder and the architect should be responsible for providing the following items:

1. A good chimney or vent pipe for the control of combustion and the exhausting of flue gases.
2. A safe structure protected from fire hazards.
3. A tight structure having a small heat loss.
4. A durable structure protected against damage by moisture condensation.
5. A comfortable structure with a minimum of drafts and cold surfaces.
6. An economical structure for heating in winter and a comfortable structure for keeping cool in the summer.

No heating plant can be expected to maintain a comfortable environment in a wind-blown tent. Conversely, in a room built of walls with a 2 foot thickness of corkboard, a few candles would suffice to maintain the desired temperature. In fact, in one of the well-insulated field structures at the University of Illinois, it was possible to maintain a temperature of 70 degrees in the room with the use of a

few light bulbs. On the basis of some thirty years of research work at the University, tests thoroughly proved that emphasis on the heating equipment alone is not sufficient, and that not enough emphasis has been placed

A HEATING SYSTEM IS MORE THAN A PACKAGED UNIT . . .



(Courtesy of Small Homes Council, University of Illinois).

on the structure itself. Comfort literally begins at the blue-print stage of a home.

A Good Chimney or Vent Pipe Is Mandatory

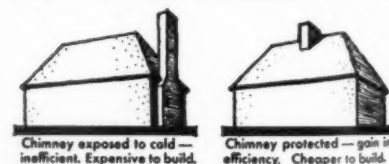
Every winter information is sought on one or more of the following complaints:

1. The furnace does not draw, and the house is slow to respond to heat demands or the gaseous fumes escape into the house.
2. The home owner is convinced that poisonous gases are being released into the structure.
3. Moisture condenses in the chimney and damages the walls next to the chimney.
4. Fires have started from poor chimney construction.

With automatic fuel-burning equipment and with forced circulation types of heating plants, the chimney can be located anywhere in the house. Nevertheless, the preferred location is an inside chimney, and the preferred height is more than 8 feet from the top to the smokepipe connection of the furnace. The chimney is a venting device that carries out the prod-

ucts of combustion to the outdoors. An outside chimney that is exposed to the weather on one or more sides will cool off when the burner stops or when the coal fire is low. Then when the burner starts again, the products

of combustion have to force their way out of a chimney filled with dense, cold gases. Frequently, a back draft may result and complaints arise due to oil fumes, suspected carbon monoxide, or smoke backing into the house. An inside chimney will not



(Courtesy of Small Homes Council, University of Illinois).

cool down as much during the off periods of the burner and is less subject to these troubles which are almost impossible to correct. Furthermore, the heat that does escape from an inside chimney to the house is regained as useful heat and will tend to reduce the fuel bill.

When gas fuel is burned, large quantities of water vapor are formed. This vapor will condense on the inside of the chimney if the inner surfaces of the chimney are cold. In a poorly constructed chimney this moisture, which contains a dilute acid, will



(Courtesy of Small Homes Council, University of Illinois).

start a des eventually walls next of a disco wet spots.

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start a destructive action which may eventually appear on the interior walls next to the chimney in the form of a discoloration of the plaster and wet spots.

Good chimney construction, whether it be of brick or of prefabricated materials, is the first essential of home building. Details of construction are given in the minimum specification of the Federal Housing Administration and should be followed.

Fire Hazards Should Be Eliminated

An appallingly large number of fires reported in this country are due to construction features of the house over which the heating contractor has little control. Some of the more common fire hazards are:

1. In certain areas where soft coal is used, the chimneys and smoke pipes will accumulate a layer of soot. Occasionally, the chimney will "burn out," the soot will catch fire, and a very hot fire will result in the chimney with the scattering of sparks. In dry weather these sparks may set fire to combustible roofs. If the house is properly framed so that no combustible material is touching the chimney no harm will result from this flash fire. If, however, the wood framing does touch the chimney, a danger spot exists.

2. Definite specifications exist for the clearance between smokepipes or vent pipes and adjacent combustible material, such as joists, wood lath and plaster, and wooden partitions. Protect such surfaces. It will be the cheapest insurance you can provide.

3. Insist on relatively short, direct, and well-supported smokepipes that will not serve as collecting chambers for soot. The sections of the smokepipe should be fitted together with metal screws, not merely shoved into place, and should be securely hung with metal straps every few feet. The smokepipe should be so built that it can withstand any puffback, outside of a major explosion. If the smokepipe is long and has a number of bends, then the home owner should reconcile himself to periodic cleanings of the pipe, particularly with coal-fired equipment.

4. This is an appropriate place to speak of thermostatic or automatic control equipment. Controls are sold primarily as a means of maintaining constant indoor temperatures. However, controls will also effectively serve to protect a home against excessively hot temperatures due to prolonged combustion. Limit controls are available that will stop an oil burner or gas burner or stoker, whenever a safe temperature of the furnace

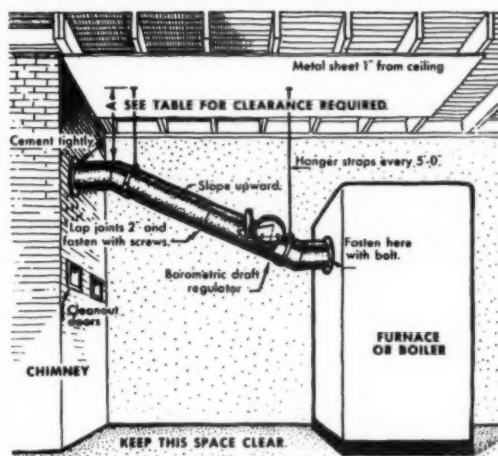
or boiler is exceeded. These controls will stand guard day and night, whether the owner is home or not. Some preferred controls will even shut off a damper in a coal-burning furnace when the electrical current supply fails. One device which has been found to be effective with hand-fired coal furnaces is the automatic draft regulating damper. This damper, when properly set by the heating contractor, will allow the furnace fire to build up to a certain temperature of the flue gas, but no further. It places a ceiling on the combustion that can be obtained in a hand-fired plant. The furnace will be slower in response to a heat demand, since the maximum fire that can be obtained is always on the safe side. However, it

country will become a have-not nation. A single house burning a few million heat units will not in itself make or break a nation. But millions of houses burning millions of heat units will have an overall effect. Accurate statistics are not available for every community, but spot checks that have been made indicate the fact that less than one house out of five effectively utilizes all the known methods of heat conservation.

During the war when fuel oil rationing was in effect, some startling variations in oil consumption were noted. One house in Champaign having 1,200 square feet of usable floor space above ground required less than 800 gallons of fuel oil a season to heat the entire house at a temperature of

SMOKE PIPE OR VENT PIPE CONNECTIONS

to the chimney should conform to the standards shown on this page. They are minimum standards for safe and efficient operation of fuel-burning equipment and are based on the requirements of the National Fire Protection Association and the National Board of Fire Underwriters.



SMOKE AND VENT PIPE CLEARANCES REQUIRED FOR SAFETY
(See "A" in drawing above.)

TYPE OF SURFACE	COAL OR OIL		GAS			
	With Metal Shield 1' from Ceiling	Without Metal Shield	Furnace or Boiler		Water Heater, Space Heater, Floor Furnaces	
Exposed Woodwork.....	12	24	Metal Vent	Type B Vent	Metal Vent	Type B Vent
Wood Lath & Plaster.....	9	18	6	1	9	3
Incombustible Lath & Plaster.....	6	9	1	1	1	1
Masonry or Concrete.....	1	1	1	1	1	1

(Courtesy of Small Homes Council, University of Illinois).

will serve not only to protect the house, the furnace, and the smokepipe, but also to reduce the heat loss from the chimney.

If this seems unduly insistent on the matter of fire safety, it should be understood that safety should precede comfort.

No Country Can Afford to Waste Fuel

The ultimate future of this country depends upon its fuel resources. The faster the fuel resources of coal, oil and gas are burned up, the sooner this

1. Combustible material must be kept away from the smoke pipe. Do not store things near it.

2. The smoke or vent pipe may be sheet metal, cement-asbestos, or porcelain enamel pipe. If sheet metal is used, it should be 24 gauge or heavier. (24 gauge is almost 1/32 inch.) The other materials should be listed by the Underwriters' Laboratories, Inc.

3. The size of the smoke or vent pipe should be equal to the size of the connection at the fuel-burning equipment.

4. The connection to the chimney should be as short and straight as possible.

5. All joints and seams should be smoke and gas tight and must be fastened securely, so any expansion or "puffs" will not loosen the pipe.

6. A draft hood is required as standard equipment for gas-fired devices.

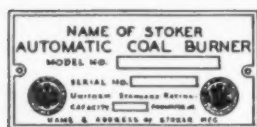
7. Automatic or barometric dampers are recommended for use with stokers and oil burners and have been successfully used in installations where coal is hand-fired.

8. A cross damper should not be used with a draft hood or a barometric damper. If it is used (usually only on hand-fired coal installations), it must be between the heater and the check damper.

72° F. Another house, obviously not weatherproofed, having the same floor area reported a need for over 3,000 gallons a year. To some extent, the burner and heating plant in the second house could be blamed, but the main source of difficulty was in the house itself. Ironically, the person who can least afford to pay a high fuel bill pays so much and gets so little return in the way of comfort.

In remodeling an existing house, the recommended steps in weatherproofing which will yield the largest returns on the investment consist of:

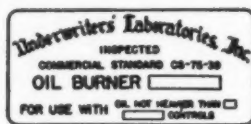
EQUIPMENT THAT MEETS SAFETY STANDARDS BEARS THESE LABELS . . .



STOKER



GAS



OIL

(Courtesy of Small Homes Council, University of Illinois).

1. Installation of storm doors, and weatherstripping of outside doors.

2. Installation of storm sash, particularly in the living room, dining room, and sun room areas.

3. Insulation of ceilings.

4. Insulation of sidewalls. This step is placed last since it is usually the most expensive.

In the case of a new home under construction, the steps are reversed, since it is better to place the insulation in the sidewalls at the time of construction and to leave to a later date those items which could be readily applied after the house is built.

The minimum requirements for FHA mortgaged homes list the minimum values for heat transmission of walls and ceilings for each locality. These are the bare minimums, and should not be considered as desirable objectives. One of the most difficult walls to insulate properly is the hollow-core wall of a masonry wall. Such walls are fire resistant in construction, but unless special insulation is used, will have heat losses that are higher than the conventional frame wall without insulation.

If panel heating with floor coils is contemplated, or in some cases if radiant baseboards are to be used in a new home, it may be necessary to have the heating contractor specify the allowable heat loss from each room in the home. For example, in the design of a floor panel system the maximum surface temperature of the floor is usually specified as 90° F. This floor surface when heated to 90° F. will emit a given amount of heat. If the amount emitted is less than the normal heat loss from the room to the outdoors, then the only way that the heat emission from the floor can be increased will be to increase the floor temperature above the desired point of satisfactory operation. Similarly, in the case of radiant baseboards, the heat output of the baseboard radiators is fixed for a given temperature of the water. If the heat loss from the room is excessively large, there may not be sufficient space on the walls to install the required footage of baseboard radiators.

The trend towards the use of large glass areas complicates the problem of satisfactory heating. In mild Cali-

fornia climates the use of single panes of windows may not involve any difficulties. However, in the colder climates, such windows will condense moisture and form ice and will be the source of local drafts. Remember that one square foot of single-pane window will transmit the same amount of heat as about 16 square feet of a well-insulated wall. It is easy to see that houses with large window areas will cost more to heat. When two layers of glass are separated by an air space, the heat loss will be cut down approximately in half. Even under this condition, the heat loss from windows is not negligible.

Homes Should Be Provided With Moisture Protection

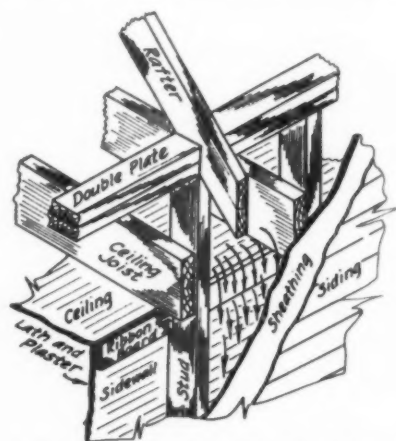
Some building contractors claim that the sidewalls of a house should not be insulated, since moisture may be condensed in the insulation or sheathing and cause damage to the structure and cause the paint to peel. This need not be the case. Vapor barriers are available which will eliminate the possibility of moisture condensation in the walls. These barriers, consisting of metal foil attached to paper, or asphalt impregnated papers, should be applied to the room side of the studding space, and preferably below the plaster base. They should not be applied next to the sheathing, since the purpose of the barrier is to stop the moisture that exists inside of the room from passing outwards, and not to stop rain from coming inwards. Both the batt type and the rigid board types of insulation are available with such vapor barriers attached to the insulation. The insulation should be carefully applied so that no spaces exist between the insulation where the water vapor can pass through.

Drafts Can Be Minimized by Good House Construction

Cold drafts in the living space can be overcome to some extent by the heating plant. However, good house construction will be more effective in eliminating drafts than will the installation of a good heating plant. The usual sources of drafts and some measures that will eliminate them can be listed as follows:

1. Drafts near outside doors. If the wind whistles through the cracks around the door, the practical solution is to weatherstrip the door, and to install storm doors. If the house contains an entrance vestibule, such spaces should be heated, preferably several degrees above normal room temperatures.

2. Drafts due to leakages around window frames. Air will leak through the small space between the movable sash and the frame. This leakage can be minimized by the use of weatherstripping and storm sash. In many



A NIAGARA of cold air from the attic descends into the open stud space. The result:

1. Heat loss estimates by the heating contractor will be underestimated.
2. An undersized furnace plant will be installed.
3. Furnace will be forced to its maximum capacity, and its life will be shortened.
4. Fuel consumption will be excessively large.
5. Wall surfaces will be considerably colder than they should be.
6. Cold inner wall surfaces will cause walls to become dirty in a short time.
7. Cold air leaks around the baseboard and floor moulding will result in presence of cold drafts at the floor level.
8. Cold air falling down off the cold wall surfaces will settle near the floor and cause cold floor conditions.

(Courtesy of the National Warm Air Heating and Air Conditioning Association).

cases, air leaks will be found to exist around the window frame where it meets the wall. Such air leaks will eventually cause long dirt streaks to fan out from the window frame. These can be eliminated by calking the joint between the outside of the frame and the exterior wall, and by stuffing the small spaces around the window framing with wool insulation, before the inside wall is applied.

3. Drafts around the baseboard. If the studding space is open to the attic, as it is in some homes, cold air from the attic space will pour down the stud spaces and leak out either in the basement, or around the baseboards. Such air leaks are not confined to studs in the outside wall, since the

studs for interior partitions may be open to the attic. The best solution is to fill the stud spaces with insulation so that air cannot pour down the space, although it can also be remedied by capping the tops of the stud spaces with wood or with blanket insulation. The drafts from this source may be so strong on windy days that a lighted match will be snuffed out when placed close to the baseboard. Leaks around fireplaces due to cold air entering the attic and rolling down the air space are possible between the fireplace chimney and the plastered wall.

4. Drafts due to leaky sills, and poor basement sash. Excessive leakages of cold air into the basement will not only increase the heat losses but will also cool the floor surfaces overhead. In many basements one can see daylight between the sill and the foundation wall. In many respects the poorest fixture in a house is the basement window, which cannot be tightly closed.

5. Drafts down stairways into a living space. The amount and temperature of the cold air that slides down stairways and settles on the first story are determined by the presence of uninsulated ceilings and walls of the stairway and of rooms on the second story, air leaks around windows and doors in second-story rooms, and inadequate heating of the rooms on the second story. Weatherproofing the second-story rooms will reduce these drafts.

6. Drafts due to cold surfaces in the room. Cool air will fall, as any housewife knows who has ever opened a refrigerator door. The room air that is next to cold wall surfaces and cold window surfaces will be cooled and will start downwards towards the floor. In the case of large window surfaces the air velocity may be as high as 150 feet a minute by the time it reaches the floor and will extend considerable distances into the room. Insulation of cold wall surfaces and the application of storm sash to single windows will increase the surface temperatures, and will, therefore, decrease the amount of cold air dropping down towards the floor, making better comfort conditions.

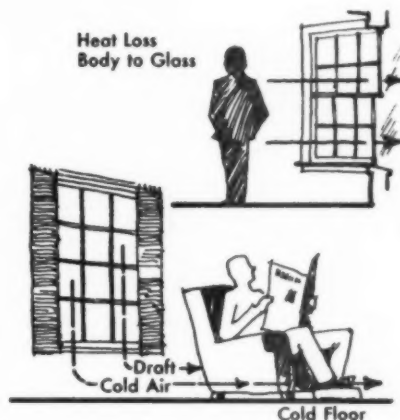
The best way to plan for a comfortable home is to take care of the numerous small items in the structure that can cause discomfort. This is the responsibility of the builder.

Builder-Heating Contractor Cooperation Is Essential

In the planning of a home the heating contractor should be consulted before the house is built, not after the house is under way. A good heating

contractor should be able to point out a few modifications in the building plans which will make for a compact and inexpensive distribution system.

Some details of performance and design of various types of systems have been covered in the previous articles by Mr. J. L. Shank. We do not expect the builder or the architect to know all the engineering details that go to make a good heating system. He will have to depend in the final measure on the reputation and



(Courtesy of Small Homes Council, University of Illinois).

the workmanship of the heating contractor. There is one criterion that can be used by a builder or home owner who is shopping for a contractor who is abreast of the times: "Is the contractor acquainted with the Codes and Manuals that have been developed for the industry?" The following Codes and Manuals supercede those

(The codes and manuals mentioned refer exclusively to warm air systems, and are obtainable from the National Warm Air Heating and Air Conditioning Association, 145 Public Square, Cleveland 14, Ohio.)

6. I-B-R Installation Guide No. 1, "One Pipe, Forced Circulation, Hot Water Systems"

7. I-B-R Installation Guide No. 2, "One Pipe Steam Heating Systems"

8. I-B-R Installation Guide No. 4, "Two Pipe, Reverse Return, Gravity Hot Water Heating System"

(The above three guides refer to steam and hot water systems and are obtainable from the Institute of Boiler and Radiator Manufacturers, 60 East 42nd St., New York 17, N.Y.)

Selection of Heating Plant Depends on Many Factors

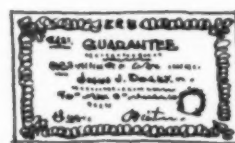
The eight codes and guides mentioned above have been based to a large extent upon long years of experimental research conducted at the University of Illinois with full scale research homes. They should be the working tools of the heating industry. With a good chimney, a well-constructed home, an up-to-date heating contractor, and any reasonably well-designed heating unit the problem of providing comfortable homes should give little concern to the builder and architect.

Untested claims of fuel savings, some of which have crept into the previous articles, should be viewed with caution. Experience has shown that a well-installed and well-regulat-

YOUR HEATING CONTRACTOR SHOULD SUPPLY THESE . . .



ENGINEERED LAYOUTS



WRITTEN GUARANTEE



SERVICE AGREEMENTS

(Courtesy of Small Homes Council, University of Illinois).

mentioned in the previous eleven articles and should be followed.

1. Manual No. 5, "Code and Manual for Gravity Warm Air Systems"

2. Manual No. 6, "Service Manual for Changing Forced-Air Systems to Continuous Air Circulation"

3. Manual No. 7, "Code and Manual for Winter Air-Conditioning Systems"

4. Manual No. 7 "Code and Manual for Ceiling Panel Systems"

5. Manual No. 9, "Technical Code for Warm-Air Installations in Larger Buildings"

ed heating plant will give about the same fuel consumption as another type of heating system equally well-installed and well-regulated. Post-graduate students are told that there is no single heating plant that will be better than all other heating plants in all cases. The selection of the best plant for a given structure in a given locality depends upon an evaluation of such factors as: degree of comfort desired, availability and cost of fuels, cost of plant, and qualifications of local heating contractors.

Heating in a home should be carefully planned by builder and architect before construction is started.

Service

For Builders and Consumer Customers

Contractors get many helps in figuring jobs and routing materials from this retailer who makes it a point to know his merchandise and all phases of his business well

THE customer is king in B. A. Chaplow's "one stop lumber shop for all building materials" in Detroit, Mich. Courtesy and service are the watchwords at all times whether the deal involves thousands of dollars worth of material for a builder or a half pint of varnish for a housewife.

Chaplow, whose business is also his hobby, constantly studies the problems of his customers so that he can be of as much help as possible in his capacity as a retailer in helping them to find satisfactory solutions. He has been connected with merchandising building materials for 27 years and has operated his own business in his present location since 1938. His outstanding success in developing a large, profitable volume in troublesome times in a highly competitive market is summed up briefly by Chaplow with the statement: "I know my business. I let my employees and my customers know that," says Chaplow, "not by telling them, but by the manner in which I treat them and operate this lumber yard."

Contractor and builder customers like the service



B. A. CHAPLOW who gives courtesy and service with materials

offered by this firm because they can get special help when it is needed. Chaplow is a draftsman and designer. He, as well as other members of the firm, will go out on jobs and help carpenters and builders make measurements for special jobs, such as custom-built woodwork, unusual stairway problems and similar work. The management of this yard makes it a point to know where the builder customers have crews working as well as what is being done on each job. Because of careful checking in this respect, some builders even depend on Chaplow to route the builder's artisans to the jobs where materials are being delivered.

Because the customer is king here, builders are given very little opportunity to complain on service, materials or prices. A very profitable trade has been developed with what can be termed "prima donna" builders—those who are not only particular about the type of jobs they will undertake, but also careful checkers of prices and quality of materials. Many dealers shy away from such customers, but Chaplow enjoys catering to such individuals because



PORTION of the display room showing one end of sales counter. Prompt, courteous attention to customers is a rigid rule here



LUNCHROOM in basement. Cook prepares luncheons which are served free to employees and customers



This building, 50x150 feet, houses sales room and offices. There is space for 65 cars in parking lot at right of store

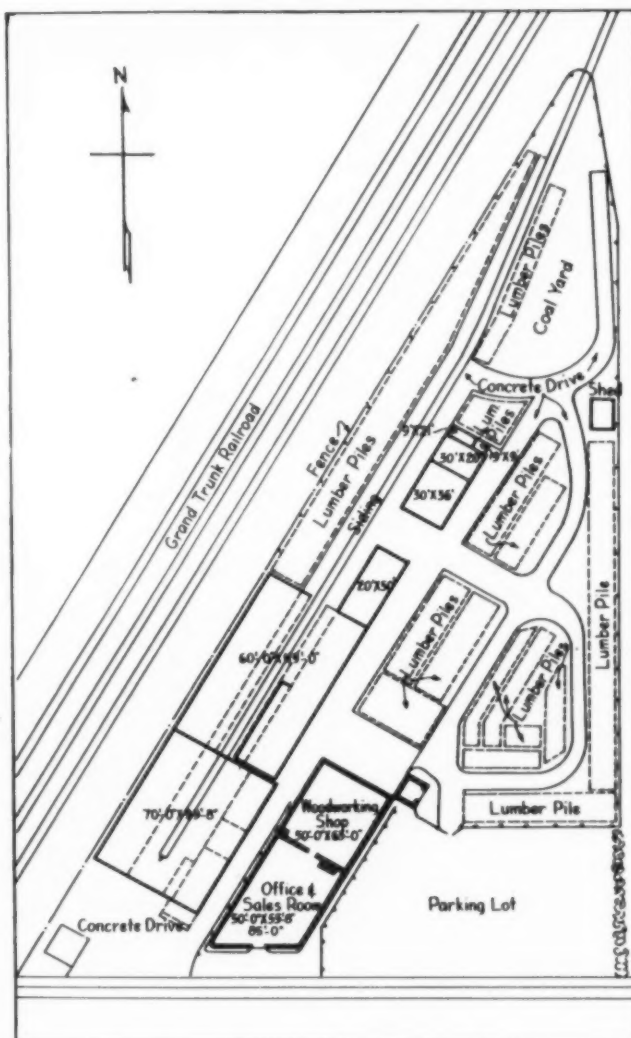
they would not be "prima donnas" if they could not afford it because of their reputations. As proof that this is a profitable class to serve, Chaplow cites the fact that at the end of 1947 his accounts receivable were only about three per cent of that year's total sales.

As part of this firm's service to builders, it operates a woodworking shop equipped to "make anything of wood for a building." Equipment includes a band saw, mortiser, shaper, drill press, sticker, joiner, two table saws, two radial saws, two belt sanders. Nine men are kept busy in this shop at present, fabricating special jobs for builders and other customers. Special cabinets, built-ins, doors, windows and similar items are produced promptly and satisfactorily.

Chaplow will not tolerate any discourteous or lackadaisical attitude by any employee toward any customer regardless of appearance, financial status, color or creed. Courteous telephone conversations are a "must" in all departments. No smoking by employees is tolerated anywhere in the offices, salesroom or yard, primarily because Chaplow believes that serving customers must occupy the entire attention of employees during working hours.

All employees receive regular daily bulletins describing material being unloaded and put in stock. The descriptions of all materials include sizes, uses, methods of application, colors in stock, special features of the materials and companion products required to complete any job using the basic material discussed in the bulletin. As many as 25 of these have been issued in one week. The practice not only keeps all employees well posted on materials in stock and prices, but constantly reminds them to sell package jobs. Orders are written very completely so that nothing is left to anyone's imagination. Chaplow is considered by two large national manufacturers of building materials as one of the top merchandisers in Michigan.

A small lunchroom, equipped with complete kitchen facilities, is located in the basement under the main office and salesroom. The cook in charge prepares food for service to all employees every noon. Employees as well as customers get free lunches through the courtesy of B. A. Chaplow.



PLAT showing the yard layout and location of principal buildings. A railroad spur comes in at rear and runs almost full length of entire property. Nine men are employed regularly in the well-equipped woodworking shop at rear of large salesroom

Behind the Scenes In an Insulation Factory

How cotton, a basic agricultural product, is processed to make home insulation for the building industry

All Photos Courtesy of National Cotton Council

THE RAPID growth in manufacture and use of flameproof cotton insulation is an outstanding development in the building material field today.

Developed initially in cooperation with the U. S. Department of Agriculture in 1940, a few manufacturers produced only 55,000 pounds that first year. Demand for the product quickly spread, and production and sales increased to 769,000 pounds in 1941, up to 7,447,000 pounds in 1943, 9,351,000 in 1945 and then rose to more than 14,316,000 pounds last year.

This newer insulating material has a number of advantages for the builder. It is light in weight, a cubic foot weighing .85 of a pound. Cotton insulation in the average attic weighs less than 200 pounds. The material stays in place permanently and will not sag or settle. Manufactured in long rolls, it can be installed rapidly, reducing labor costs. Ample length of rolls means less piecing and no gaps in the insulation where drafts or excessive moisture may penetrate. Tests by the Department of Agriculture, covering a long period of time, show the product to be resistant to mildew and rot, moisture and vermin.

One of the features of cotton insulation is its resilience. Cotton insulation, compressed tightly for shipping or storage, will quickly regain its original thickness when it is unrolled.

All insulation manufactured by members of the Cotton Insulation Association is flameproofed under rigid specifications. When subjected to the flame of a blow torch at 1800 degrees, the surface will blacken but will not burn or support combustion. Cotton insulation has been known to prevent the spread of residential fires.

The primary test of any insulation material is its "K" factor, or the amount of heat which may be transmitted through it. The lower this factor, the better the insulation is. The "K" factor for cotton insulation is .242.

Exhaustive tests by the Bureau of Standards have established the value of cotton insulation in the acoustical field. Two inches of the material, installed in any wall, will effectively bar the passage of sound. This quality, in addition to its values as a thermal insulator, has brought about its widespread use in many hospitals, theaters and other buildings needing sound control.

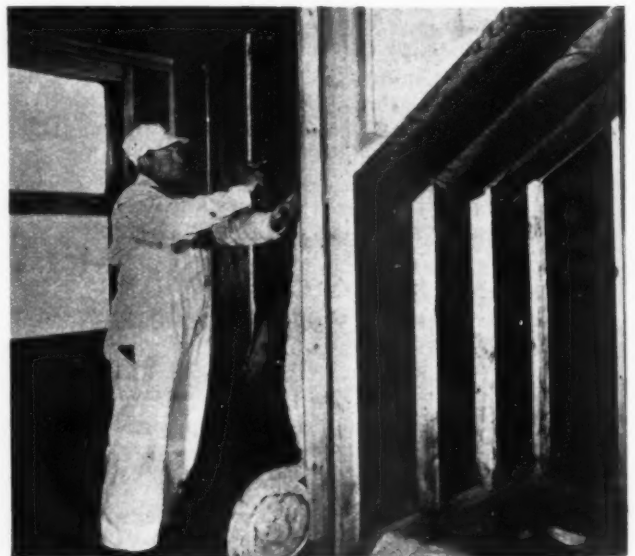
Flameproof cotton insulation is made from virgin short-staple cotton of which there is always a plentiful supply. Manufacturers of cotton insulation are located throughout the country.



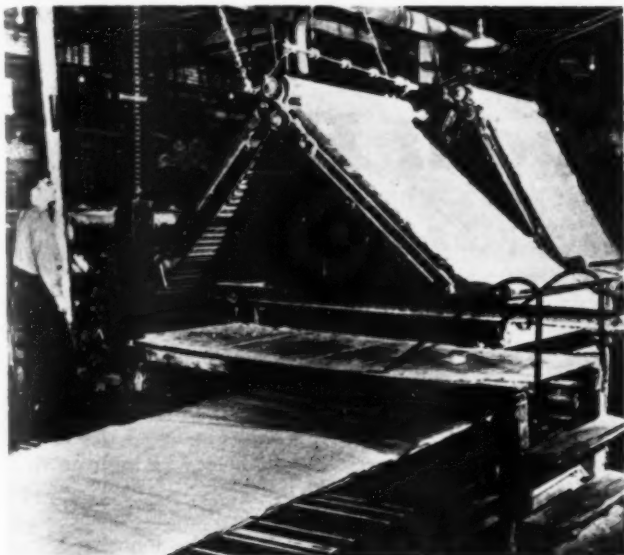
1. VIRGIN, fleecy cotton goes through flameproofing bath as one of first steps in manufacturing cotton insulation



4. SAMPLES of insulation are submitted to 1800-degree test. Surface blackens; does not burn



7. FLANGES on the waterproof backing of cotton insulation permit easy vertical installation between studding



2. GARNETTING machines transform loose cotton into filmy sheets, piling layer upon layer for required thickness



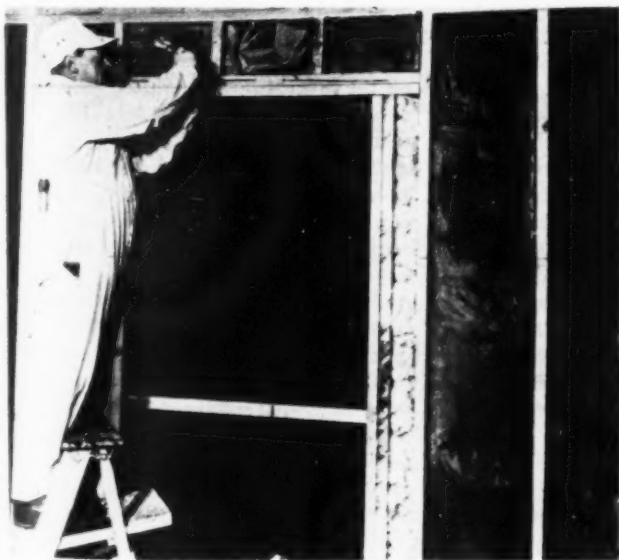
3. ROTARY knives cut the cotton insulation into specified widths before it is attached to the waterproof backing



5. COTTON insulation, compressed tightly for shipping or storage, quickly regains thickness when unrolled



6. COTTON insulation installed over entrance hall. Re-splendent cotton has regained its original fluffy thickness



8. SHORT ends left over from installing long cotton blankets are used in small spaces around doors and windows



9. TO INSTALL cotton insulation, the workman needs a stapler, a heavy pair of shears, and a step-ladder

There Is Too Much Loose Talk— About Housing

By R. E. Saberson

THE big job ahead for the home building industry is to continue to prove, through performance, that it is entitled to the same important place in our industrial activities in the future that it has occupied in the past.

This may be increasingly difficult, since it now is plainly apparent that for some strange reason no industry was ever subjected to such a continuous barrage of criticism, much of which is unfair, misleading, or even downright dishonest.

Perhaps the tendency to take a swift kick at the industry is due to the fact that it is made up of so many far-flung, component parts that it lacks any semblance of cohesive form. There is little, if any, chance for it to speak as a whole or to exercise any control whatever upon the activities of the countless individuals, or companies, that build from one to a thousand or more homes per year which add up finally to a highly satisfactory total.

No Other Industry Receives As Much Political Criticism

This complete lack of unity conforms to the government's anti-monopolistic idea of how an industry should operate. Yet there is no other industry today that receives so much of the politicians' zealous criticism and attention. In a nation that has been beset with innumerable shortages brought about by war, the housing problem transcends all others in the political discussions it has created and in the "relief" measures that have been advocated . . . often by those who are not fitted by knowledge or experience to pose as authorities on the subject.

It might be noted in passing that those industries which are made up of the fewest companies invariably escape the criticism of politicians or the public. We hear little of relief measures to correct the shortages of the several products which constitute the real bottlenecks of the home building industry. Given these critical items, home builders would soon be producing homes at a rate which would turn current shortages into an oversupply. Just why the industry that *needs* these items, in order to carry on successfully, should bear the brunt of the criticism instead of the

industries that are supposed to *produce* them may possibly be ascribed to the fact that the industry is too far-flung to speak vigorously for itself and to point effectively to its many achievements.

Competition Forces Homes To Be Better and Cheaper

Now there is no gainsaying the fact that a great many inferior homes have been built since the end of the war, or even before hostilities began, and that they were sold at exceedingly high prices. That, however, is only part of the story and perhaps a smaller part than many suppose. Without a single exception, the same thing has been true in every other industry.

It follows, however, that homes, like everything else, will become better and cheaper as supply lines fill up, labor becomes more plentiful and there are fewer customers to buy them. Competition works wonders in this connection. Already this is beginning to take place, albeit not to the same extent as in the case of certain other products, as witness the furrowed brows of distributors with heavy inventories of questionable merchandise. The pipe line of houses may be slower in filling up but it will fill up sooner than expected.

Under such circumstances it is always interesting to read the statements of the critics of the industry and to examine the claims of those crusaders who set about to solve the housing problem.

With this in mind let's take a look at the April issue of "48," self-styled "magazine of the year," in which we find a typically-critical article by William E. Masee, who makes the following statements concerning the "housing lobby" that "dedicates several hundred thousand dollars a year to the proposition that each member of the housing industry should be financially secure, no matter how much it costs the rest of us."

This money, according to the writer, is spent in perpetuating the following ideals: (1) The housing shortage is essential to the building industry's prosperity and should continue. (2) Houses should be built only for those making \$5,000 a year or more. (3) Rents should be higher.

(4) Public housing is a threat to democracy. (5) No one should build houses except those in the industry. (6) Home-ownership is the only worth-while housing goal for true Americans—at prices as high as the traffic will bear.

Since V-J Day—and on the national level alone—the lobby and its allies have pursued these ideals by such methods as: (1) Helping to wreck the government's housing program. (2) Blocking \$35,000,000 worth of Reconstruction Finance Corporation loans to housing manufacturers. (3) Forcing the relaxation of rent controls. (4) Arranging to shelve the Taft-Ellender-Wagner bill, which would provide for the erection of 15,000,000 homes in ten years. (5) Paralyzing the prefabrication industry. (6) Securing the elimination of price controls on building materials.

Mr. Masee's article points out that the "housing lobby" has been so successful that, no matter how much the average American would like to own or rent a decent home, "such homes are out of the question for a third of the nation, far beyond the means of another third, and a very precarious investment even for the wealthiest ten per cent of the population."

President's Economic Report Lists Industry's Achievements

Keeping this statement in mind, let us now turn to the construction industry's achievements in 1947—one of the largest home building years on record, with approximately 850,000 completions. It is interesting to observe how the facts in the case, as given in the President's Economic Report of January, 1948, compare with Mr. Masee's ideas on the subject:

"Twenty-eight per cent of the families had incomes below \$2,000. Excluding the families with incomes of less than \$1,000, who customarily are not in the market for new homes, 15 per cent of the families had incomes between \$1,000 and \$2,000. These families could afford homes costing \$4,500 or less. And 20 per cent of the new homes were in that bracket.

"Twenty per cent of the families had incomes between \$2,000 and \$3,000. These families could afford

homes costing \$4,500 to \$7,000. And 23 per cent of the new homes were in that bracket.

"Eighteen per cent of the families had incomes between \$3,000 and \$4,000. These families could afford homes costing between \$7,000 and \$10,000. And 25 per cent of the homes were in that bracket.

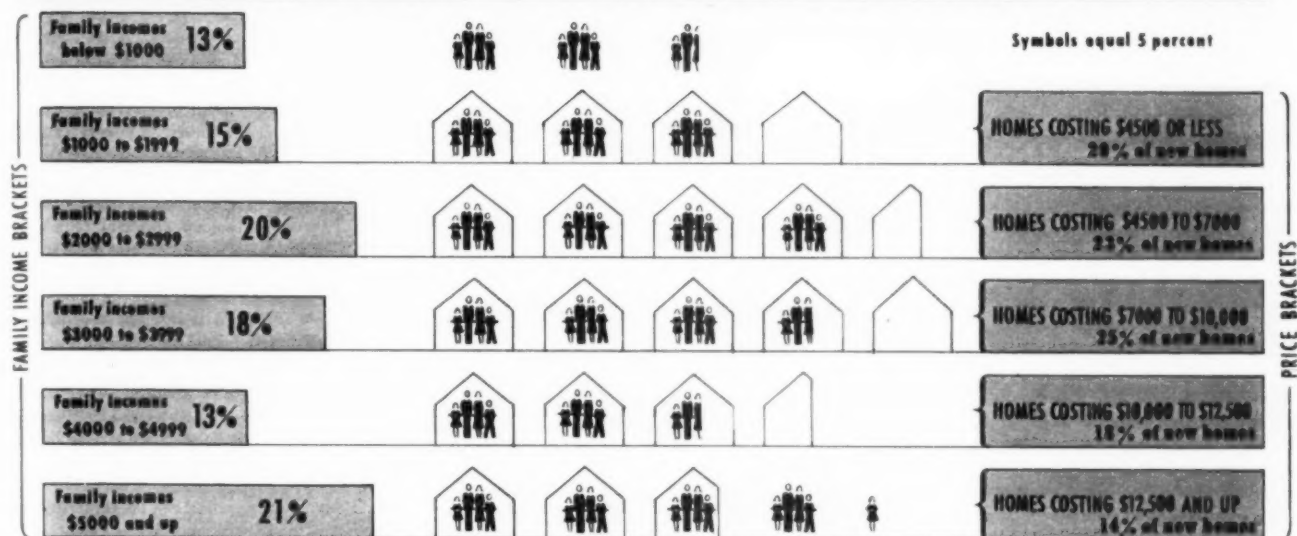
"Thirteen per cent of the fami-

for certain prefabricators who were supposed to produce so many homes that the sum total would make a sizable dent in the housing shortage. It will be remembered that no guaranteed markets were granted that segment of the home building industry which had made the United States the greatest home owning nation in the world . . . the segment that

involved in Wyatt's guaranteed market program can hardly be described as "paralyzing." And the blocking of \$35,000,000 worth of RFC loans to stimulate further production along the same lines and for the same purpose might even be regarded by taxpayers as a highly patriotic act.

The guaranteed market fiasco should in nowise be regarded as a

WHO BOUGHT THE 850,000 HOMES BUILT IN 1947 ?



lies had incomes between \$4,000 and \$5,000. They could afford homes costing between \$10,000 and \$12,500. And 18 per cent of the new homes were in that bracket.

"Twenty-one per cent of the families had incomes in excess of \$5,000. They could afford homes costing \$12,500 and up. But only 14 per cent of the homes were in that bracket."

From this report it is plainly evident that homes were built in approximate proportion to ability to pay, for every one of the income groups that is in the market for new homes, except the families with the highest incomes.

This, of course, is exactly the opposite of Writer Massee's statements. One is only required to decide which report is the more authentic.

Space does not permit us to deal with each of Mr. Massee's claims concerning the so-called reprehensive activities of the "housing lobby." We will merely touch upon two that pertain to house prefabricators, in which it is stated that said lobby set about to "paralyze" the prefabrication industry and to "block" \$35,000,000 worth of Reconstruction Finance Corporation loans to housing manufacturers.

Once again let us look at the facts in the case and consider especially the "paralyzing" effects of Expediter Wyatt's guaranteed market program

was then busily engaged in building 850,000 homes despite the almost insurmountable problems created by shortages of materials and manpower. It was the new and untried that captured the imagination of the Expediter, who said in effect: "Go ahead and make 'em—if you can't sell 'em, we'll take them off your hands."

Over Three Million Dollars Spent on Guaranteed Markets

By this time it would seem that everyone knows what happened. The figures have been published far and wide, but for some reason or other are ignored by Mr. Massee. Here they are as they appeared in the Chicago Tribune, February 15:

"Richard Alger, director of the Administration's prefab program, said the program has cost the government \$3,250,000 to date and further expenditures for settling contracts guaranteeing markets for prefabricated homes will boost the loss to \$3,600,000. Alger said the government has had to take over 299 'packaged' plywood prefabs for which the builder could not find a market and has paid three firms more than two million dollars to cancel their government contracts. Alger said about \$2,250,000 was paid for the houses the government had to take over."

The almost unbelievable generosity

black mark against that segment of the prefabricated house industry which was well organized, amply financed, efficiently managed and proceeding on its way by virtue of its skill and ability and earning its place in the sun through the quality of its output.

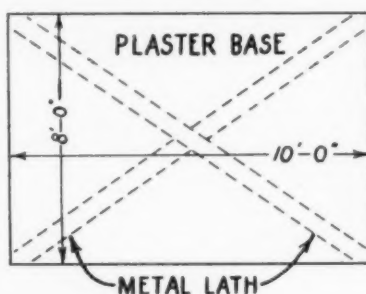
Writer Massee's article is a typical example of the loose talk which is being fed the public. Such being the case, it would seem to justify the existence of a powerful "housing lobby" if it were possible to organize one to protect the industry and refute the many unjust statements that appear in many magazines and newspapers from whence vote-seeking politicians apparently take their cue. Conceivably an industry might be done away with, as nations have been destroyed, by devastating propaganda . . . provided it is made strong enough, as a former well-known paper hanger once remarked.

We have no brief for those in the home building industry who seize upon the opportunity to give the least possible house for the most money while the getting is good. The same thing is true of any other industry. It merely is our contention that this element does not represent the great rank and file and that maximum value in housing in the future will come through free competitive enterprise as it has in the past.



How-To-Do-It Pointers

How to Prevent Cracks In Plaster Ceilings



WILLIAM BERTAGNOLI, Hurley, Wis., submits this suggestion. To prevent cracks from occurring in a plastered ceiling, nail strips of metal lath approximately 6 inches wide to the plaster base. These strips should extend from one corner of the room to the opposite corner as shown.

How to Avoid Split Boards When Nailing



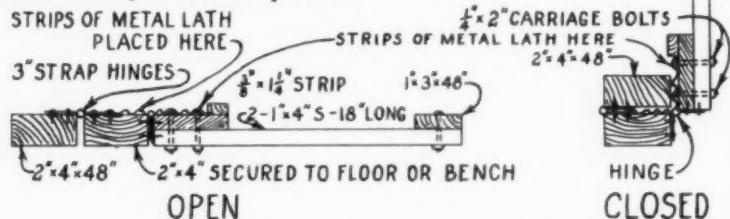
RUSSELL WHITE, Georgetown, Ohio, states that by employing the following procedure, the splitting of boards when nailing may be reduced to a minimum.

Place head of nail on a solid surface. Hit nail point two or three light blows with hammer. This will batter the nail point, permitting it to cut through the board instead of splitting.

How to Make Expanded Metal Brake

A METHOD for making an expanded metal brake is submitted by J. G. Caldwell, San Mateo, Calif.

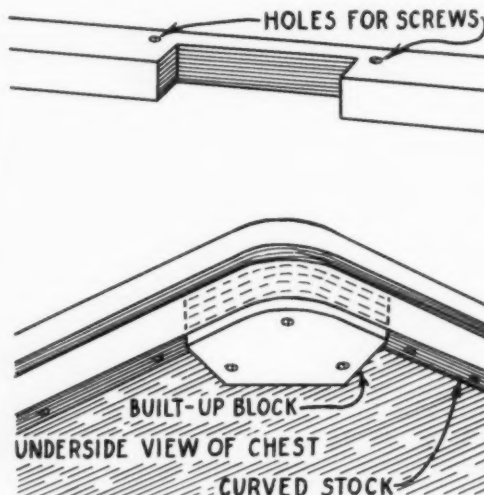
One of the 2x4-inch members of the brake is secured to floor or bench. Strips of metal lath are cut and placed in the brake as indicated. The hinged 2x4 is moved on top of the metal lath to hold it in position. The handle is then grasped firmly and pulled to a vertical position. This action bends the metal lath to 90°, making it ready to be placed at the intersection of wall and ceiling. The brake may be made in lengths from 48 inches to 98 inches. It bends the lath easily with a sharp corner.



How to Curve Thick Wood Stock

TO BEND thick stock in a continuous strip around corners on cabinets and chests, **Herbert E. Fey**, New Braunfels, Texas, suggests this method.

First, the corner is fitted with a built-up block as shown. Then, the strip to be curved is cut narrower at the point where the strip is to be bent. The radius determines the thickness of the bent portion. Cut in this way (with one end of the strip screwed to the cabinet), the strip can then be curved without splitting.

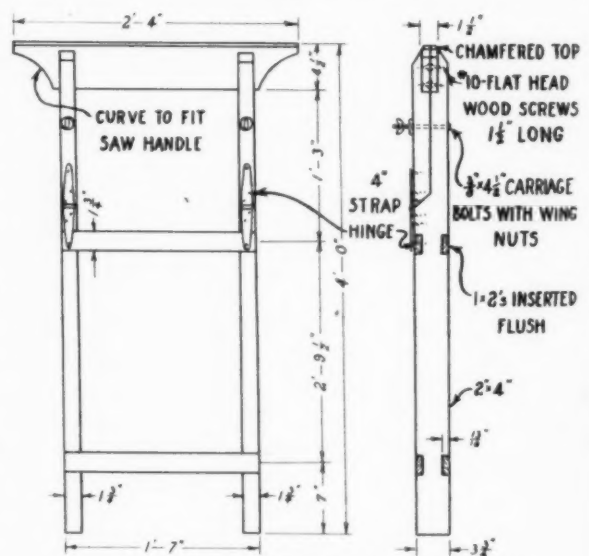


How to Make A Saw Clamp

FROM **Robert K. Schelhorn**, instructor at The Hershey Industrial School, Hershey, Pa., comes this idea.

Because of simplified construction and ease of handling, the saw clamp can be moved as required.

For use in sharpening saws, the clamp can be placed against bench or counter and held in position by the operator.



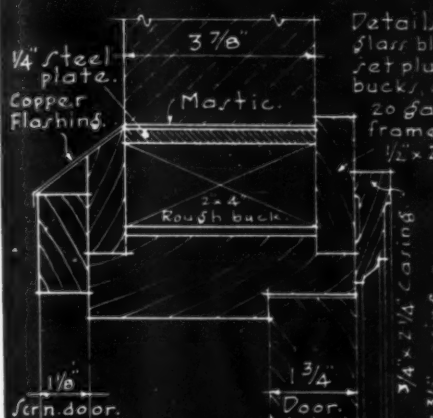
(Continued to page 140)

AMERICAN BUILDER'S BETTER DETAIL PLATE

American Builder, June 1948.

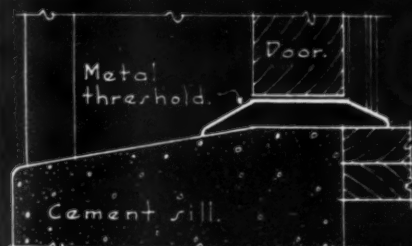
119

NO. D-44. FRAMES IN GLASS BLOCK PANELS.

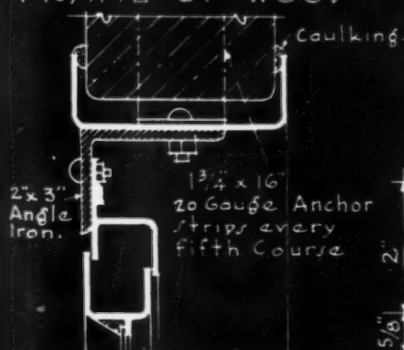


HEAD SECTION.

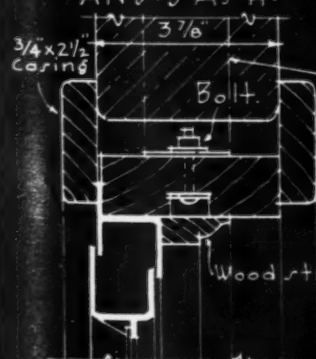
Note: Jamb section to be anchored same as in detail of Double Hung window frame.



SILL SECTION.
EXTERIOR DOOR
FRAME OF WOOD.

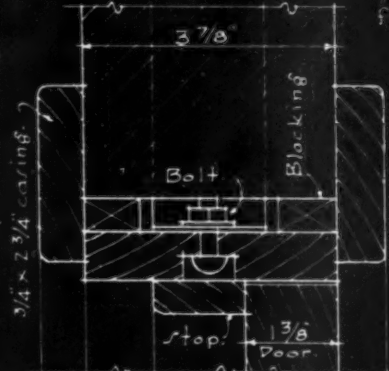


METAL FRAME
AND SASH.

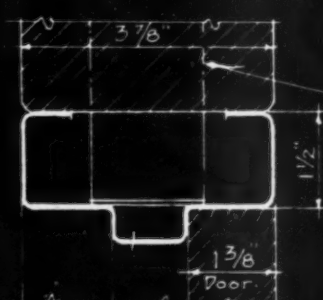


WOOD FRAME.
STEEL SASH.

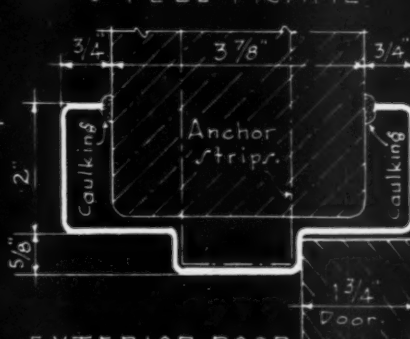
Details for installing window, sash and door frames in glass block walls and panels. If wood bucks are used, set plumb and square. Lay glass blocks to wood buck, anchoring at every 5th course with 1 3/4 x 16" 20 gauge perforated steel anchors. Fasten frame to buck. Apply sub casing, and trim.



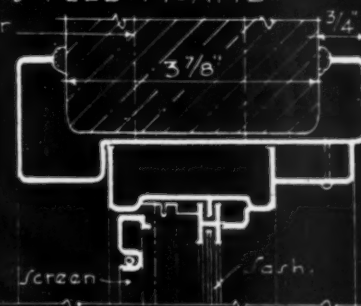
INTERIOR DOOR
FRAME OF WOOD.



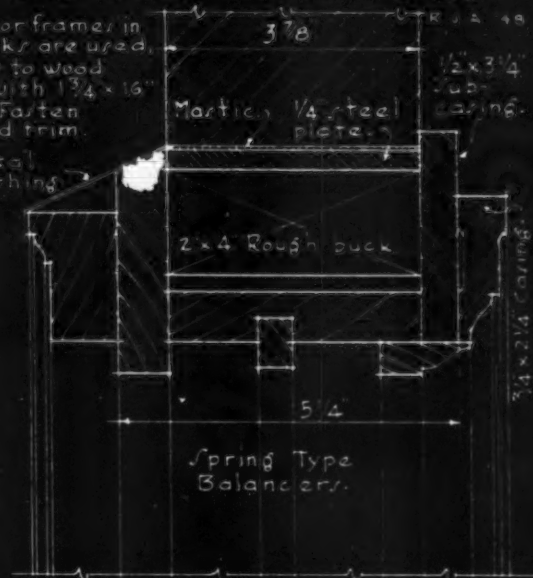
INTERIOR DOOR
STEEL FRAME.



EXTERIOR DOOR
STEEL FRAME.

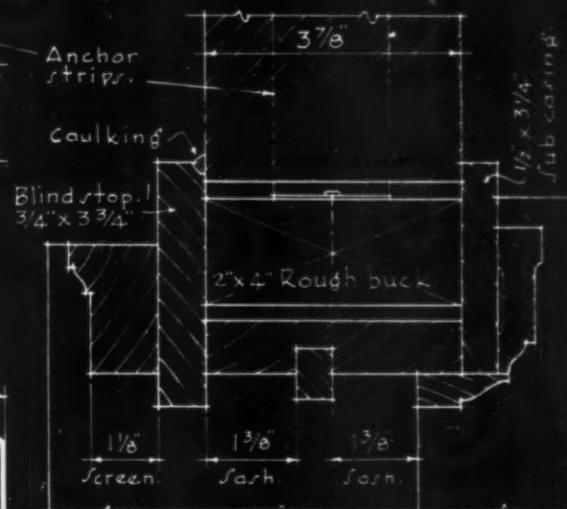


DOUBLE HUNG METAL
FRAME AND SASH.

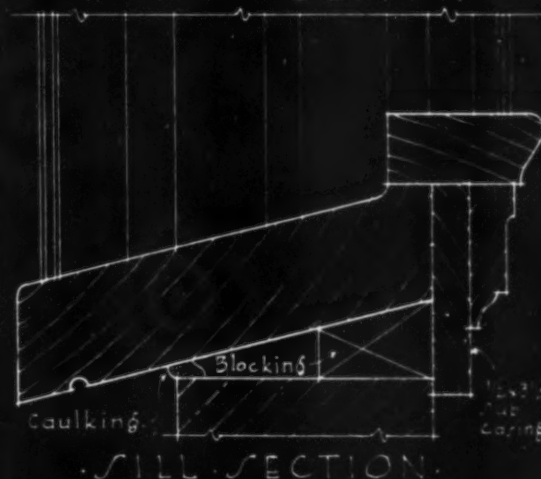


HEAD SECTION.

Anchors to be fastened to wood buck.



JAMB SECTION.



SILL SECTION.

WOOD WINDOW FRAME
DOUBLE HUNG SASH.



NEW PRODUCTS

Offered by Manufacturers

PRE-MOLDED COVE BASE

AB6801

A pre-molded flexible plastic cove base is announced by Hachmeister-Inc., 2332 Forbes St., Pittsburgh, Pa. Called the Hako Plastic Base, this product is set directly on the finished floor, or can be applied with special cement to any level wall surface. Being flexible, it is easy to fit

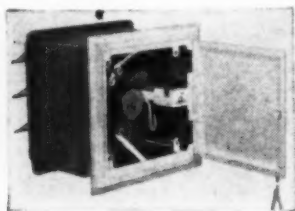


around corners. Besides being easy to clean, Hako Base is grease-proof, odorless, and resistant to all household cleaners and solvents.

KITCHEN VENT FANS

AB6803

The Signal Electric Manufacturing Co. of Menominee, Mich., manufacture a kitchen vent fan that is adjustable for wall thicknesses 6 to 11½ inches, and 13 to 24 inches. The outside shutter frame is cast aluminum with automatic lever operated shutters. The motor is totally en-

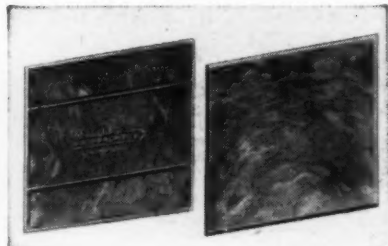


closed and can be disconnected or removed for cleaning. The unit is equipped with a 10-inch quiet-type fan.

PLASTIC WALL TILE

AB6816

Wilson Plastics, Inc., 131 Arthur St., Sandusky, Ohio, have devised a new type of plastic wall tile. Their tile is molded with four undercuts extending across the back. When pressed into place, the undercut ribs become a mechanical lock between the mastic and the tile, and together with the

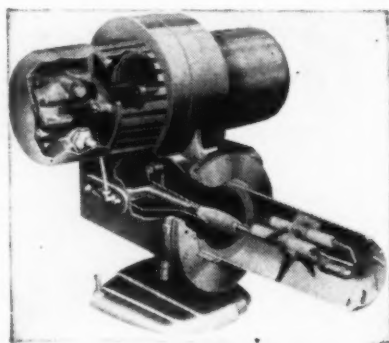


bond of the mastic results in an installation that is smooth and even. The locking ribs not only give added strength and rigidity to the finished wall but prevent the mastic from drawing the tile concave when it dries. Trade named Lockback, the tiles are available in twenty colors, marbleizations and trims.

SMALL OIL BURNER

AB6817

The smallest gun-type, pressure atomizing conversion oil burner in the York-Heat line is announced by York-Shipley, Incorporated, York, Pa. Designed for small homes, the burner is adaptable to



any boiler or furnace in the small home heating field. Known as Model C-7, the burner has a firing capacity of from 1 to 2.25 gallons an hour for a rating of 100,000 B.T.U. an hour minimum to a maximum of 225,000 B.T.U. an hour. It features an aluminum casting made by a permanent mold process, and the Iris Shutter which is exclusive with York products. Available in seven different capacities, depending on the nozzle size, the burner will operate on kerosene, light oils or catalytic oils.

MORTAR FOR GLASS BLOCKS

AB6815

A mortar sealant specially formulated for use on glass block has been

developed by the American Fluresit Co. Inc., 635 Rockdale Ave., Cincinnati 29, Ohio. Known as the Klee Sealant, it is a rubbery substance that coats the exterior mortar joints, adheres to the mortar and forms a tight flexible bond to the glass, expanding and contracting with the mortar and the glass without rupturing the film. Of plastic-like consistency, Klee Sealant can be applied with a caulking gun or thinned for brushing. It will bond tightly to



mortar, glass, tile, brick, metal and wood. Packed in quart and gallon containers, it is available in white or in other colors.

GARBAGE DISPOSER

AB6805

A low-priced, easily installed garbage disposer is being produced for the average home. Designed to fit most double-bowl sinks without lowering the waste line, the unit requires only two connections when installed—a simple toggle switch and a waste line connection. Like other disposers, it



cuts, shreds, and grinds all bones, fruit pits, parings, seeds, shells and other food wastes to tiny particles that are swirled down the drain. Produced by the Given Manufacturing Co., 2412 West 7th St., Los Angeles 5, Calif., it is called the "Little King Pulverator" and carries FHA approval. Important features are a

white enamel finish, Dura-Steel cutting parts, and double wall construction with dead air space to reduced noise.

TACKMASTER**AB6806**

A handy tool for applying rock wool batts, blankets and foil-type insula-



tion is to be found in the improved Markwell tacker. A light weight model, it is compact and ruggedly constructed to drive the Markwell "RHD" 5/16-inch staples flush into rafters, joists, and studs. Another outstanding feature is its design which permits it to reach into the eaves and dormer rafters. Manufactured by the Markwell Manufacturing Co., Inc., 200 Hudson St., New York City, it is called the "RH" Insulation Tackmaster.

SCREEN DOOR BRACE**AB6812**

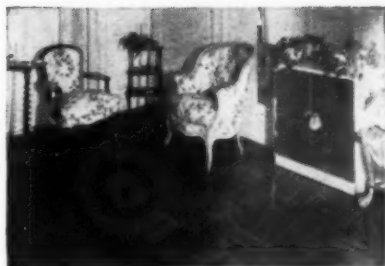
To prevent or correct sagging screen doors The Stanley Works, New Brit-



ain, Conn., offer a new screen door brace. Feature of the 21-inch wrought steel brace is a brass adjustment screw, located at one end for quick and easy regulation and desired tension. Applied to inside of door, brace is inconspicuous and tamper proof. The Stanley company identifies this product as door brace No. 1738.

INSULATED FLOORING**AB6809**

A flooring that is soundproof, water-proof, cannot squeak and is easy to install is available. It is made of kiln-dried hardwood boards cut into 6-inch, 9-inch, or 12-inch squares, each of which is insulated on all four edges by a 1/4-inch latex-filled strip of non-skid fibrous material. When installed, each square is at right angles to the adjoining square, resulting in an attractive parquetry as well as durable floor, insulated throughout. A mastic glue secures each square firmly to the sub-floor, cement slab or old flooring, eliminating nails entirely. At the edges of the room, squares are



easily fit around pipes or cut to fit. In the latter case, end-waste in cutting runs as low as 4 per cent. Named the Castle Square Flooring, this product is manufacturing by the Newcastle Industries, Inc., 300 West 56th Street, New York 19, N.Y.

PORTABLE MASONRY SAW**AB6813**

A new portable, electric-guided saw performs rapid cutting operations on the job in cutting concrete blocks and slabs, marble, granite, face and common brick or structural steel. Known as the Stone Blue Streak, it is light, weighing but 78 pounds. In the picture, it is being used to cut reinforced concrete floor slabs and makes the



complete cut in about 45 seconds. Cuts wet or dry, using diamond or abrasive wheels. Manufactured by Stone Machinery Co., Manlius, N.Y.

PORTABLE FANS**AB6808**

An innovation in electric fan design is introduced in the Modern-Aire Consoles produced by the National Gas Equipment Co., Inc., Terrell, Texas. These lightweight fans are enclosed in a streamlined heavy wire basket equipped with tubular steel handle and base. Designed to set on the floor, the unique enclosure eliminates the danger of accidents occurring to passersby or small children. The line features General Electric motors. To provide maximum air movement with minimum turbulence, each fan has three overlapping blades.

CIRCULAR HEATER**AB6807**

A new type of circular unit heater known as the Vertiflow is on the market. Made by the Young Radiator

Co., Racine, Wis., the unit is a vertical discharge type. Outstanding feature is a unique motor-cooling method known as "open stack" ventilation. By mounting the motor in a stack that is open at both ends, at the center of the circular heating core, motor baking is eliminated. Specially-designed fans draw room air through the open ventilating stack and, at the same time, direct the air taken from the heated core downward through the fan opening. This provides a flow of air around the motor which reduces



the motor operating temperature. The Vertiflow line includes seven models designed to deliver from 52,600 to 552,000 B.T.U.'s an hour.

BATHROOM CABINETS**AB6818**

An oval mirror door which looks like a decorative mirror when the door is shut is the outstanding feature of the Beau-Fort Model 27D bathroom cabinet. The mirror hides the entire cabinet and swings open on a specially designed hinge. A bullet door catch, rubber bumpers, padded metal-drum mirror back and chrome-plated mirror clips add long life and serviceability to the cabinet. It is equipped with a razor blade disposal drop, rounded shelf holders to keep it free from dust, and three sturdy machine-edge glass shelves. The Beau-Fort



line of bathroom cabinets is made by The Toledo Plate & Window Glass Co., 1041 Utica St., Toledo, Ohio.

GAS RANGES**AB6802**

The Magic Chef provides a total of 28 different models in the 1948 line of gas ranges. Designed to fit any kitchen arrangement and to meet practically any price or purpose, the models range in size from a 20-inch

wide apartment unit to a 43-inch wide deluxe model. Such features as the automatic oven clock control, glass in oven door, and top griddle vary in the different units, but important innovations in design are standard.



These comprise a one-piece top combining backguard, cooking surface and front panel; an oven with rounded corners for proper heat circulation; a high-level swing out broiler that is smokeless and completely removable; a chrome, hood-type flue deflector; and "Fiberglas" insulation. American Stove Co., 4301 Perkins Ave., Cleveland 3, Ohio, is the manufacturer.

SASH BALANCE

AB6804

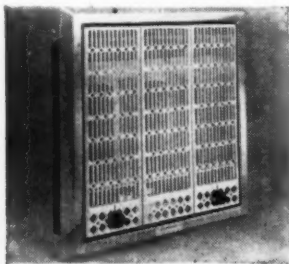
A flat-type sash balance designed to eliminate cable jamming between face plate and cable drum has been introduced by Acme Sash Balance Co., 1626 Long Beach Ave., Los Angeles, Calif. This improvement is achieved through the use of an embossed face plate which provides a protective nest for the cable drum. The embossed feature is said to materially strengthen the face plate and the entire balance. Additional features include a special oil-impregnated fibre washer between spring housing and face plate for quiet, friction-free operation.



WALL MODEL HEATER

AB6819

The wall model heater recently announced by the Electric Heating



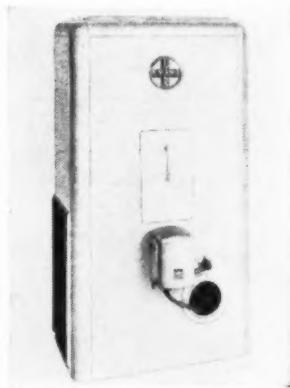
Dept., Westinghouse Electric Corp., Emeryville 8, Calif., features a built-

in thermostat with adjustable control. The model, designed to be recessed in the wall, is equipped with an attractive modern grill. Approved by the Underwriters Laboratories, Inc., it heats by both radiation and convection. Units are available with 1,500 to 4,000-watt capacities, and operate on 230 volts A.C.

COMPACT FURNACES

AB6811

The furnace pictured is designed primarily for closet or utility room installation but may also be centrally located in the basement. It is Model 378 of a new four unit line of oil-fired furnaces now in production at the Evans Products Co.'s Plymouth, Mich., plant. The line includes three compact, packaged furnaces and a new conversion burner, all shipped



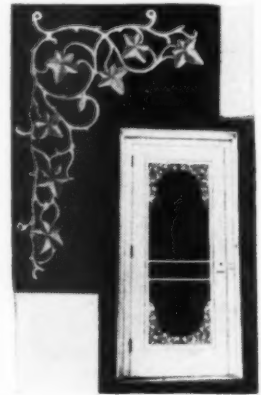
completely assembled and wired for installation. Model 388 is an all purpose furnace designed for use in small and medium-sized homes as a winter air conditioning system. Model 458 is for basementless homes. Only 24 inches wide and 39 inches in depth, is easily installed between floor joists.

ORNAMENTAL SCROLLS

AB6810

Ornamental scrolls for use on screen doors and storm doors can be obtained from the Howard A. Daum Co., P.O. Box 7981, Pittsburgh 16, Pa. Reproduced from hand carved

designs, these scrolls are made of cast aluminum finished with a base white coat of baked-on enamel. They are

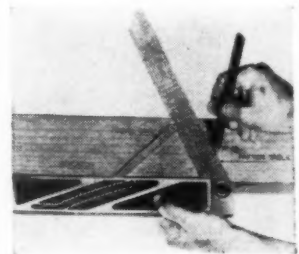


packaged in cartons per set, complete with special aluminum screws, ready for installation. Trade-named Scroll-Ettes, they are designed to fit any door. The current line features eight patterns.

AUTOMATIC FRAMING SQUARE

AB6814

An automatic framing square which quickly and accurately figures roof framing is being manufactured by Lloyd L. Crowley, 1880 South 12th St., Salem, Ore. Combining the principles of a framing square and a slide rule, the tool solves framing problems and provides a pattern for marking all cuts; all the operator needs to



know is the width of the building and the pitch of the roof. Rafter tables on either side of a jackknife blade enables the user to determine the rise per foot and length of rafter at a glance.

CHECK NUMBERS AND MAIL COUPON FOR INFORMATION

American Builder, 105 West Adams Street, Chicago 3, Illinois

NAME..... ADDRESS.....

CITY..... STATE.....

AB6801	AB6805	AB6809	AB6813	AB6817
AB6802	AB6806	AB6810	AB6814	AB6818
AB6803	AB6807	AB6811	AB6815	AB6819
AB6804	AB6808	AB6812	AB6816	

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.



That's the No. 1 Plank in the Ro-Way Platform

We adopted it in 1908.

We've been running on it ever since.

Must be pretty sound, too.

Each year Ro-Way has rolled along to record breaking popularity.

It has carried every state in the Union . . . most cities and towns, too.

In your classified telephone directory you will find the name of the Ro-Way Distributor.

He's as popular as Ro-Way Doors . . . and just as proud as we are of the *No. 1 Plank in the Ro-Way Platform*.

When we say we design and build Ro-Ways to give "Better service for more years", he backs us up by installing them so they *will* give you "just that".



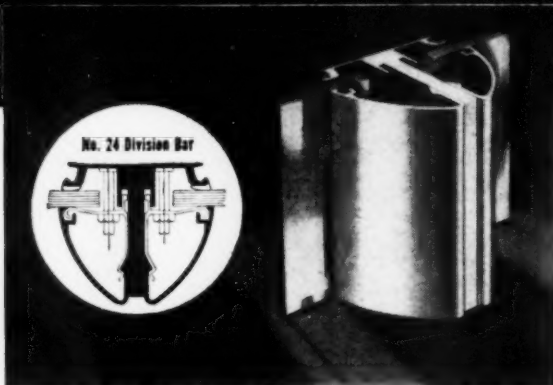
On any ticket calling for overhead type doors, mark "Ro-Way". You'll pick a winner every time.

Rowe Manufacturing Company, 737 Holton St., Galesburg, Illinois, U.S.A.

There's a RoWay for every Doorway!



Customers like "the modern look", the

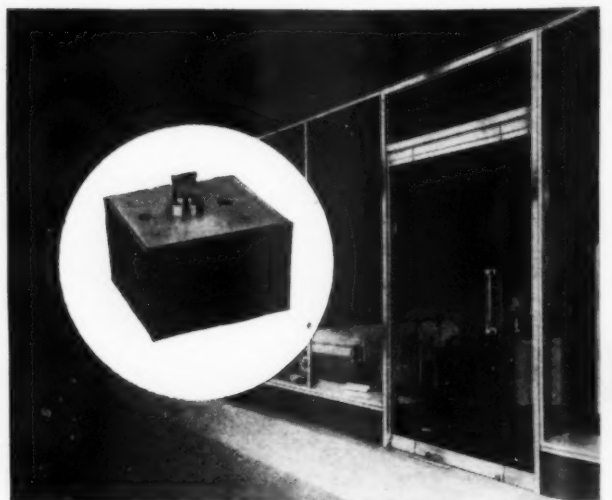


Pittco De Luxe Division Bar

Quick, Easy Installation is possible with both lines of Pittco Store Front Metal. All setting operations are carried on from outside, and the speed and simplicity of setting procedures reduce installation time and save money. Pittco De Luxe is extruded to give it sturdy strength, sharp profiles, and a rich, lustrous finish . . . it is a quality metal for better jobs. Pittco Premier is lighter in weight and more moderately priced than its distinguished companion line . . . it features gracefully curving lines and a smooth, attractive finish.

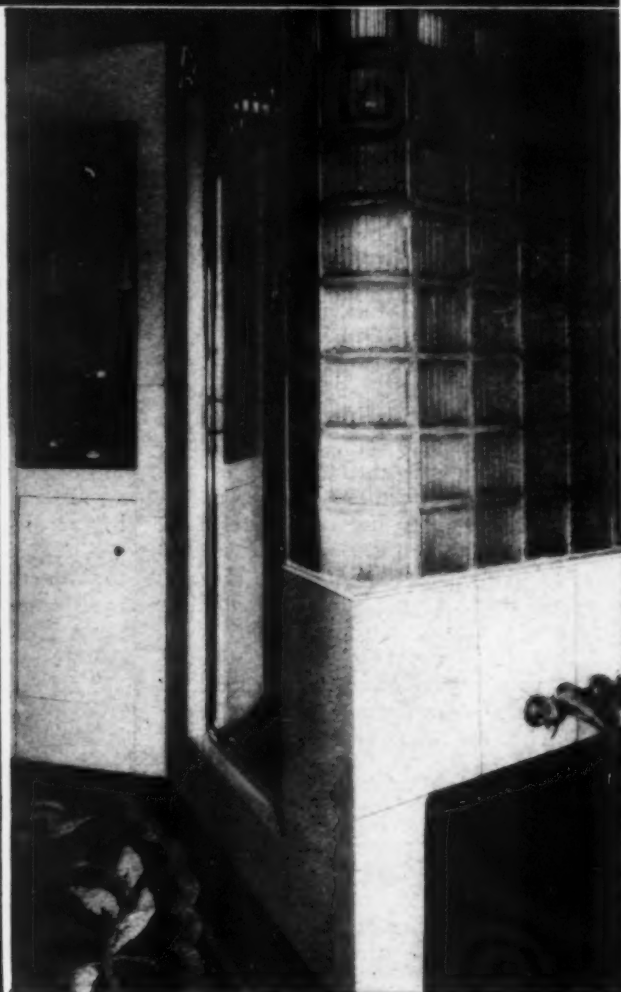
Assembled, Ready to Install . . . that's the new Herculite Door-Frame Assembly to accommodate standard Herculite Doors. The entire assembly comes as a complete package that may be installed as a unit as soon as a building is ready to receive doors. It is available in twelve styles to satisfy every door requirement, and it is one of the sturdiest and handsomest structural shapes ever designed. The Pittco Checking Floor Hinge was specially designed as a part of this assembly. It is precision-made and includes positive door-speed control, separate checking control, built-in hold-open feature, and other unique advantages.

Open Vision Stores permit customers to see merchandise displayed in the store interior, thus arousing greater interest, increasing sales appeal, and building a larger volume of business. Progressive merchants are anxious to use "open vision" to help them boost sales. Sell them a "Pittsburgh" store front. The "Pittsburgh" name is well known as the leader in store modernization work. When you offer Pittsburgh Glass Products, Pittco Store Front Metal and an experienced crew of "Pittsburgh" workmen to do the job, you are offering your customers the most modern and attractive store front installations available.



PITTSBURGH PLATE GLASS COMPANY

...they want to use *more Glass*



A Wall Mirror reflects all a room's color and movement, making it seem brighter and larger. And a handsome picture window brings the outdoors closer, admitting floods of daylight. If insulated windows are necessary, suggest Twindow. "Pittsburgh's" new window with built-in insulation. Twindow practically eliminates fogging, reduces down drafts near window areas, and helps to maintain an even room temperature.

Add Color and Glamor to bathroom and kitchen with walls or wainscots of Carrara Structural Glass. Carrara's range of ten attractive colors permits it to be blended with practically any color scheme, and it's very easy to keep it bright and shiny indefinitely. Pittsburgh Corning Glass Blocks make an ideal shower partition. The smart Plate Glass shower door replaces a bedraggled curtain.

We will gladly send you free our special "Builders Kit" which includes illustrated literature showing how you can use glass effectively on all types of jobs in which you are interested.

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DEALER REVIEW



NEWS OF NRLDA AND STATE AND REGIONAL ASSOCIATIONS

National Receives ATAE Award For Industry Engineered Homes Program

THE National Retail Lumber Dealers Association has been presented with an American Trade Association Executives "Award of Merit" for development and promotion of the Industry Engineered Homes Program. Placing second in the large national association classification of the ATAE awards, the NRLDA was cited for "outstanding service to the industry which it represents as well as to the American public." The Award of Merit was presented at the ATAE 13th National Awards luncheon at the Statler Hotel, Washington, D. C., April 26. David Bruce, assistant secretary of the Department of Commerce, made the presentation of the award to Secretary-Manager H. R. Northup.

The NRLDA received its first ATAE award entirely on the public service value of its development and promotion of lower cost homes for American homeseekers through the Industry Engineered Homes program. Each of the federated associations promoting the engineered house in the field, and who make up the National Association, will receive a replica of the award to the National for their part in

making the program a big success.

The overall objectives of the IE Homes program are three in number:

1. To meet America's need for lower cost homes without sacrificing essential standards and quality. This program, it was pointed out, was not a "poverty housing" program, but was designed to develop means of lowering the cost of home construction regardless of the price level existing at any given time.

2. To provide smaller contractors everywhere with the coordinated materials, methods and designs generally available to large-scale operative builders.

3. To meet the challenge of public housers, in and out of government, and to prove that private enterprise could provide the homes needed by America.

Such ideological objectives had to be translated into practical terms. The practical objectives, therefore, were five in number:

- A. To secure cooperation between the manufacturing and distributing elements in the building industry essential to the continu-

(Continued to page 128)

Camouflaged Public Housing



by H. R. NORTHUP
Secretary-Manager NRLDA

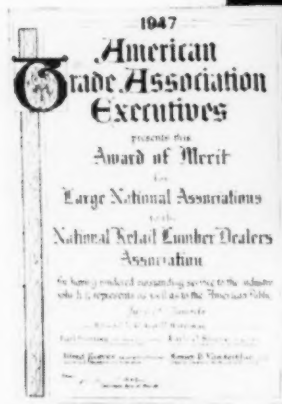
Since **FHA Title VI** has been included, it is now obvious that the so-called T-E-W Bill is a cleverly camouflaged public housing bill which was never designed as an aid to private industry.

Authority for the FHA to insure home loans under Title VI of the National Housing Act is in no way connected with any long-range housing program.

The proponents of the long range housing bill, in insisting on the mere 30-day extension of Title VI, obviously were attempting to blackmail the House of Representatives into passing legislation which admittedly would not be acceptable to the House unless Title VI extension were made a part of the legislation.

It is equally obvious that proponents of the long range housing bill have no faith in the merits of the public housing bill when they openly admit that its defeat is a certainty once Title VI is removed by enactment in a separate bill such as proposed by Senator Cain of Washington. If the public housing provisions of the long range housing bill cannot be sustained on their own merits, then the legislation should be defeated.

The proponents of public housing are at last out in the open as to their intentions. Although they profess to provide aid for private industry to build houses, the real intention is to establish a long term public housing program which will finally throttle the private building industry and socialize housing in America.



SECRETARY-MANAGER H. R. "Cotton" Northup receiving "Award of Merit" from the American Trade Association Executives in recognition of work the NRLDA has done in promoting economy housing with the Industry Engineered Homes Program. David Bruce, assistant secretary of the Department of Commerce, made the presentation

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Clipper MASONRY SAWS

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YES...CLIPPERS ARE GUARANTEED "To Provide the Fastest Cut at the Lowest Cost with the Greatest Ease... Any Time — Any Where!"

Now, more than ever before, the need is for fast accurate masonry cutting. Just consider the advantages when you can slice through Glazed Tile, Brick, Concrete, Fire Brick, Stone, even Glass and Marble. Better workmanship at lower costs — no delays — contractors everywhere say "Clippers perform like magic."

CUT WET — CUT DRY with Clipper
The 100% answer on every job the year around

DUSTLESS — At a moment's notice you can turn the coolant valve and the new HD48 Clipper cuts wet without dust. Ideal when working in closely confined areas. In cold weather, just cut dry. Wet or dry cutting depends on job conditions, materials and operator preferences. Both are necessary and with this new Clipper you will have both — the 100% answer.

FREE TRIAL on Your Job!

You take no chance! Why should you? For more than ten years every Clipper has been shipped on FREE TRIAL. See it on your job. Try it. Compare Clipper with any other method. You must be absolutely satisfied. Remember! You Try before you Buy.



AUTOMATIC PRESSURE CONTROL
Just one of the many exclusive Clipper features... It provides unequalled sensitivity for fast cutting and economy. Other Clipper features are, Instant Height Adjustment, Multiple Cutting Action, Portability, Snap On Blade Covers and the Knowledge that created the original masonry saw which today is better than ever.



CUT IN 5 SECONDS BY CLIPPER

CUT IN 19 SECONDS BY CLIPPER

CUT IN 21 SECONDS BY CLIPPER

CUT IN 8 SECONDS BY CLIPPER

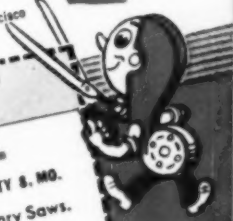
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Send complete literature and prices on all Clipper Masonry Saws.
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The beauty of

PAINE REZO DOORS

is that

every builder can afford them



U.S. Pat. 1,887,814. The exclusive interlocking grid core within the Rezo door allows constant air circulation, adds extra strength, provides greater rigidity.

Fortunately beauty and economy go hand in hand in Paine Rezo doors, give you both a sales approach to your customer and a practical approach to your job. Pre-fitted and light in weight, the 1 3/4" Paine Rezo is quickly hung. The clear flush surface takes little time for painting or staining, goes twice as fast as a panel door . . . specific advantages that make the installed cost of Paine Rezo doors no more than ordinary doors.

The air-cell construction features are exclusive and patented—minimize warping and shrinking, provide the greatest dimensional stability of any door. Home buyers benefit, too, from values like this . . . and there is no denying how much these smartly styled doors can do to make small rooms seem more spacious and charming. Because these built-in qualities never fail, over two million Paine Rezo doors are in service today—the choice of America's leading contractors and builders. Ask your dealer for Paine Rezo doors, or write for a factual bulletin.

Manufactured by the

PAINE LUMBER CO., Ltd. Oshkosh Wisconsin

ESTABLISHED 1853

Dealer Review

(Continued from page 126)

ous flow of coordinated modular materials which could be combined with the least lost time and waste.

B. To study methods, designs and on-site construction procedures and to publish the resulting recommendations for the benefit of all those engaged in small home construction.

C. To stimulate local building industry interest in and acceptance of the program.

D. To inform the public of the industry's research and results and to explain the possible benefits of the program to the American homeseeker.

E. To promote actual local construction of model homes incorporating the principles and procedures recommended for use in small home construction.

Herb Stokely Heads Texas Association

HERB STOKELY, mayor of Brownsville, Texas, was named president of the Lumbermen's Association of Texas at Galveston in April. Stokely, serving his second



HERB STOKELY, mayor of Brownsville, president, Texas Lumbermen's Ass'n

consecutive term as mayor, was unopposed for re-election. He is identified with numerous civic activities in the city.

An interesting recreational activity at the convention of the Texas association in Galveston was a fishing contest. The fishing was done off the end of the Galveston pier from a deck about 15 feet above the waters of the Gulf of Mexico. The largest fish caught was an amber jack weighing 35 pounds, four ounces. It was caught by Oscar R. Spencer, retail lumberman from Marlin, Texas. Spencer used two hooks baited with cut mullet. The jack took both hooks,

(Continued to page 130)

Build More Salable Homes with PC Glass Blocks



THEIR preference for glass blocks has been expressed by a large proportion of the people who currently intend to buy or build new homes. So you can build more sales appeal into your homes when you include attractive panels of PC Glass Blocks—especially around doorways, in stairwells, in kitchens and in bathrooms.

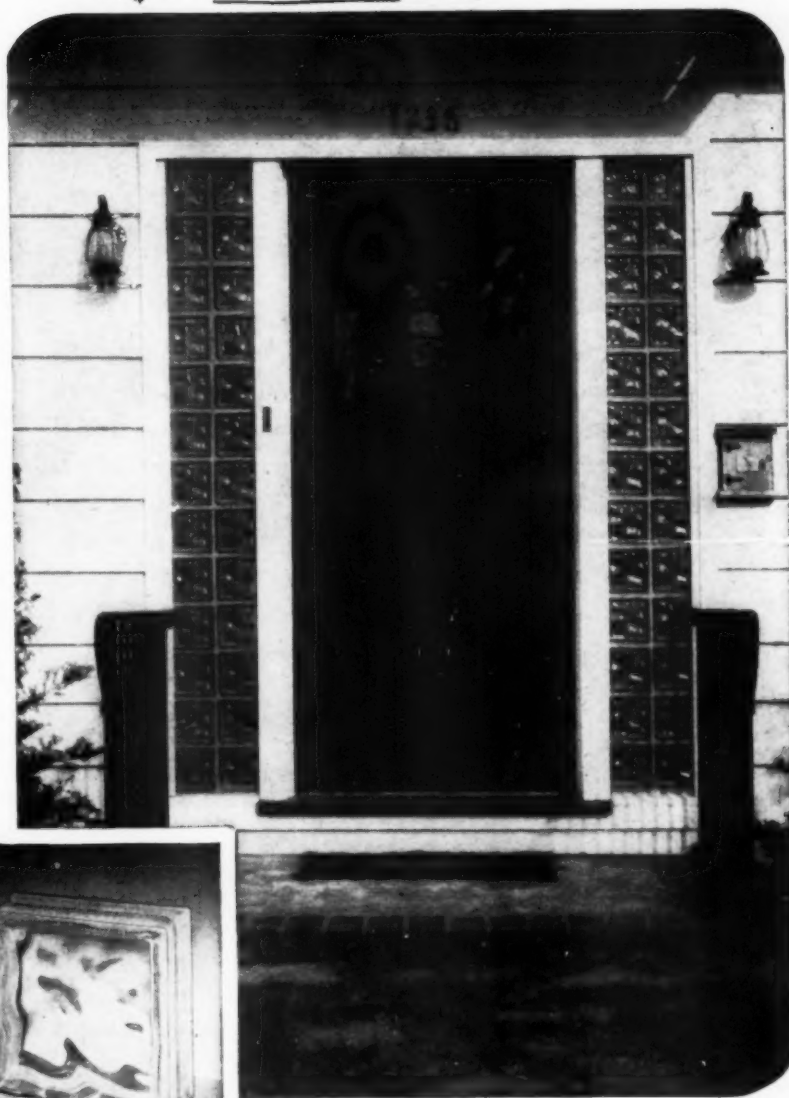
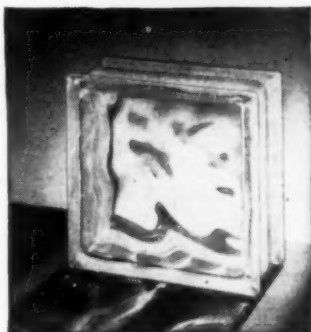
And now you can get *prompt delivery* on all sizes, shapes and patterns of PC Glass Blocks for new construction and for remodeling jobs. No waiting for hard to get metal.

PC Glass Blocks, modern and attractive in appearance, are adaptable to all styles of architecture. They admit plenty of daylight. They insulate lighting areas, thereby reduce heating and air-conditioning costs. They are easier to clean than windows. They require no up-keep, no painting, no storm sash.

Whether you are doing new construction or remodeling jobs—homes, offices, shops or stores—be sure you have the latest information on PC Glass Blocks. Send the coupon for your *free* copy of our new booklet. Pittsburgh Corning Corporation also makes PC Foamglas Insulation.

PC GLASS BLOCKS

...the mark of a modern building

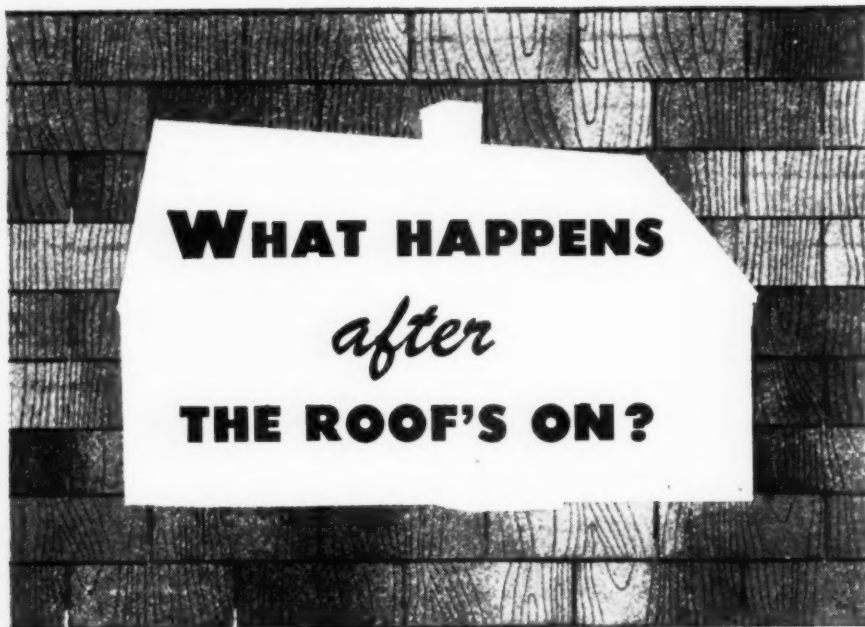


GLASS BLOCKS

Distributed by PITTSBURGH PLATE GLASS COMPANY

by W. P. Fuller & Co. on the Pacific Coast and by Hobbs Glass Ltd. in Canada

FOR ADDITIONAL INFORMATION SEE OUR INSERTS IN SWEET'S CATALOGS.



WHAT HAPPENS *after* THE ROOF'S ON?



A roof is no better than its shingle ... and unless it's a *good* shingle, the effort and skill you put into your building is wasted.

Bird Masterbilt Thick Butt Shingles stand the test of time ... a Bird roof is a better roof. *Extra* layers of asphalt and deeply embedded mineral granules give tough lasting protection *where it counts* ... on exposed tabs. The rugged surface defies weather ... and fire resistance is greatly increased for the long life of the shingle. Narrower cut-outs and heavier shadow-lines give added massive beauty ... and a wide range of handsome lasting colors and blends is available.

Test Bird Masterbilt Shingles yourself ... compare them. They are your assurance of years of extra wear, of lasting beauty.

★ ★ ★

Bird helps you build better homes in many ways. Neponset Black Vapor Barrier guards against costly damaging in-wall condensation, yet costs approximately \$20 for a \$10,000 house. Investigate it today.

,inc.

Established
1795

Chicago

Dealer Review

(Continued from page 128)

and was gaffed by Spencer unaided, and hauled up to the deck. The jack was caught on the closing day, and was worth two dollars a pound to Spencer. The next largest catch was a 14-pound drum-head.



OSCAR R. SPENCER, Cash Building Materials Co., Marlin, Texas, holding 35-pound amber jack, largest catch made during Texas retailers' convention at Galveston

Directory Lists Producers Of Shingles on West Coast

THE Red Cedar Shingle Bureau has prepared a directory of Pacific Northwest shingle manufacturers. The names and addresses of approximately 100 producers in Washington, Oregon and British Columbia are listed.

Copies of the directory are available free of charge from the Red Cedar Shingle Bureau, 5510 White Building, Seattle, Wash.

Owens-Illinois Purchases Plywood, Veneer Firms

PURCHASE of all the common stock of Blair Veneer Co., North Troy, Vt., and its wholly owned subsidiary, Vermont Plywood, Hancock, Vt., by the Owens-Illinois Glass Co., has been announced jointly by W. E. Levis, chairman of Owens-Illinois, and Charles T. Hall, chairman of Blair Veneer.

Blair Veneer and Vermont Plywood will continue to operate under present management and to supply customers as they have in the past. They will be operated as a part of American Structural
(Continued to page 132)

Precision

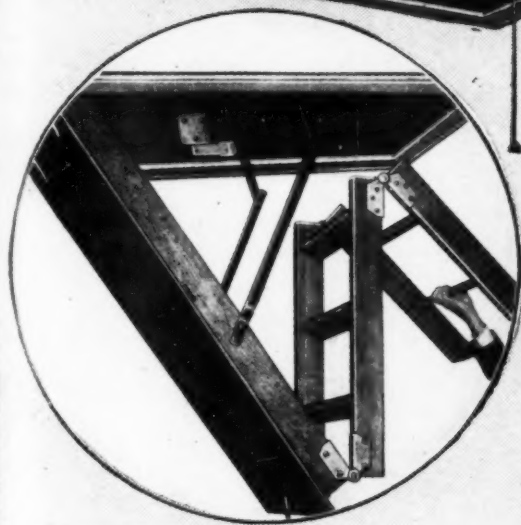
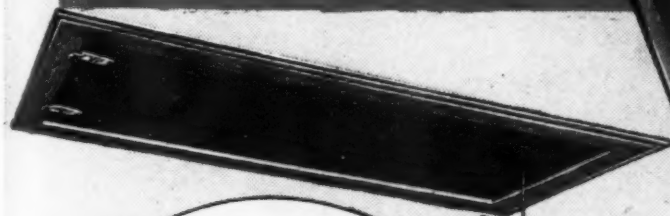
FOLDING STAIRWAY

ACCEPTED BY FHA EVERYWHERE
PATENT APPLIED FOR

NO SPRINGS!
No Adjustments Necessary!
RUGGED AND STRONG
SIMPLE AND EASY TO OPERATE

MADE OF HIGHEST QUALITY MATERIALS

SHIPPED IN ONE PACKAGE
REQUIRES VERY LITTLE
INSTALLATION EXPENSE



SAFETY TREADS →

GRADUATIONS ON
RUNNERS FACILITATE
CUTTING OFF FOR
DIFFERENT CEILING
HEIGHTS →

PRECISION PARTS CORP.

NASHVILLE 7, TENN.

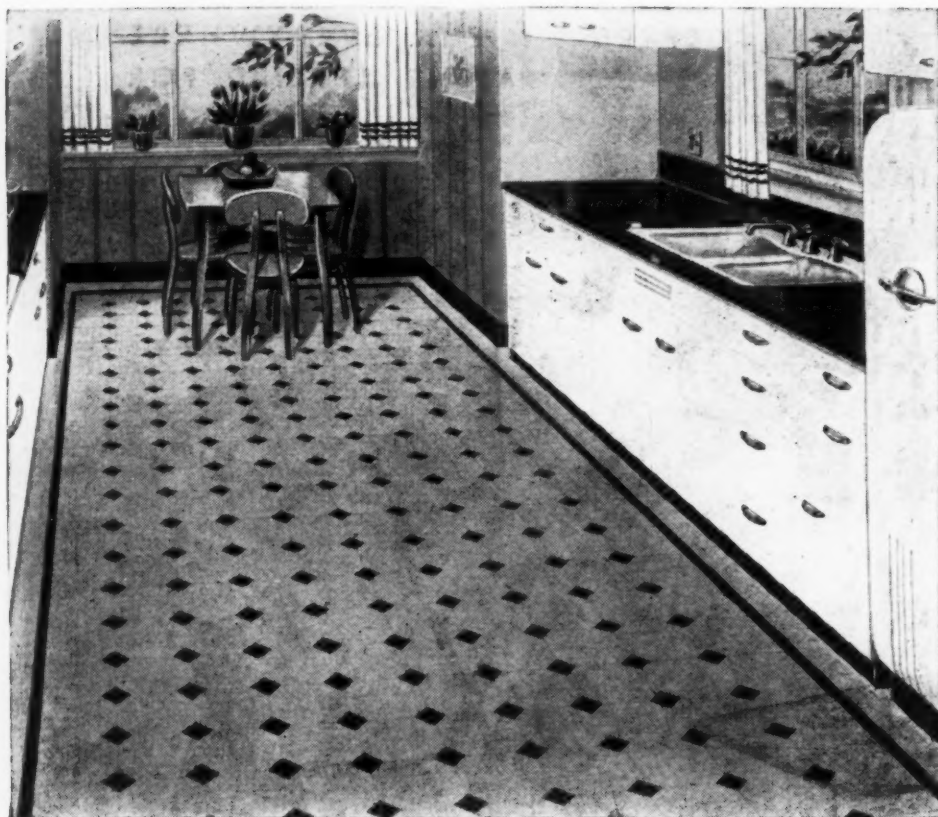
NAME _____

ADDRESS _____

TWO STANDARD SIZES

8' 9" and 9' 9"
FLOOR TO CEILING

The **PREFERRED** Home Floor *is* Wright Rubber Tile



Color Goes Clear Through



New Walking Comfort



Easiest to Clean

LIFETIME SMARTNESS—the keynote of Wright Rubber Tile advertising in leading magazines to home owners—expresses the fast mounting trend in home floors, and explains the increasing preference for Wright Rubber Tile in the home, among architects and builders.

WRIGHTTEX is the recommended Wright Rubber Tile for home floors. Its complete adaptability to present day trends and home-floor requirements is notable. Its wide choice of rich, enduring colors and sizes assures the much-wanted variety of individual designs, that fit your decorative plans.

From the practical side—the resilient texture of WRIGHTTEX cushions every step . . . an important addition to kitchen floors especially. It is noiseless. Furthermore, it is the easiest of all floors to keep clean, glowing and lustrous.

Where radiant heat is planned—WRIGHTTEX is the outstanding preference. Exhaustive tests demonstrate that it is not affected by high temperatures . . . reduces heat loss to a minimum . . . odorless.

In the home market, as well as for churches and hospitals, WRIGHTTEX sets the top-quality pace, as does WRIGHTFLOR for commercial and business installations exposed to heavy traffic. For complete information on Wright Rubber Tile, write—Taylor Manufacturing Company, 3050 W. Meinecke Ave., Milwaukee 10, Wis.—America's oldest maker of rubber floor tile.

WRIGHT RUBBER TILE
Floors of Distinction

Dealer Review

(Continued from page 130)

Products Co., Owens-Illinois subsidiary. Since Blair Veneer and Vermont Plywood are hardwood manufacturers this acquisition will not constitute a source of plywood for building material accounts of American Structural, Mr. Levis said. It is expected, however, that eventually a part of the output of Blair Veneer and Vermont Plywood will find outlets in products manufactured by American Structural and also that the plywood plants will use some of American Structural's products in their processes.

Family Has Total of 82 Years' Service in Industry

A FAMILY of lumbermen are the Kaufmans with a combined service of 82 years in lumber and building materials retailing. J. Kaufman, standing, and his three sons are managers of retail lumber stores for The Long-Bell Lumber



Co. Hugh Kaufman, seated left, is the manager of the Long-Bell store in Clovis, N. M. His brother, Joe, center, manages the Long-Bell store in Garden City, Kan., and brother, Jack, is manager at Altus, Okla. Father Kaufman is the manager of the Long-Bell retail outlet at Fairview, Okla. Long-Bell operates 119 retail lumber and building materials stores in Oklahoma, Texas, New Mexico, Kansas, Arkansas, Missouri, Colorado, Oregon, Washington and California.

Southern Pine Association Elects H. M. Seaman

H. M. SEAMAN, of Houston, Texas, was elected president of the Southern Pine Association at the 33rd annual convention conducted in New Orleans. Other

(Continued to page 134)

QUICK DELIVERY ON METAL DOORS

...Complete with frames and hardware already sized to fit!

Nothing else to order : : : no waiting for other parts. You get them fast—you install them fast. No mortising, no drilling, no tapping, no prime coating. *No wonder they save construction time and money!*

LOW COST—standardization of types and sizes results in manufacturing economies. That's why Fenestra can do so much preliminary work on these doors at the factory and still offer them at prices below many doors now on the market. They're quality doors in every respect—worthy of the well-known Fenestra name.

ORDER THESE SIZES TODAY:

2'8" x 6'8" 3'0" x 7'0" 4'0" x 8'0"
2'8" x 7'0" 3'8" x 7'0" 5'0" x 10'0"

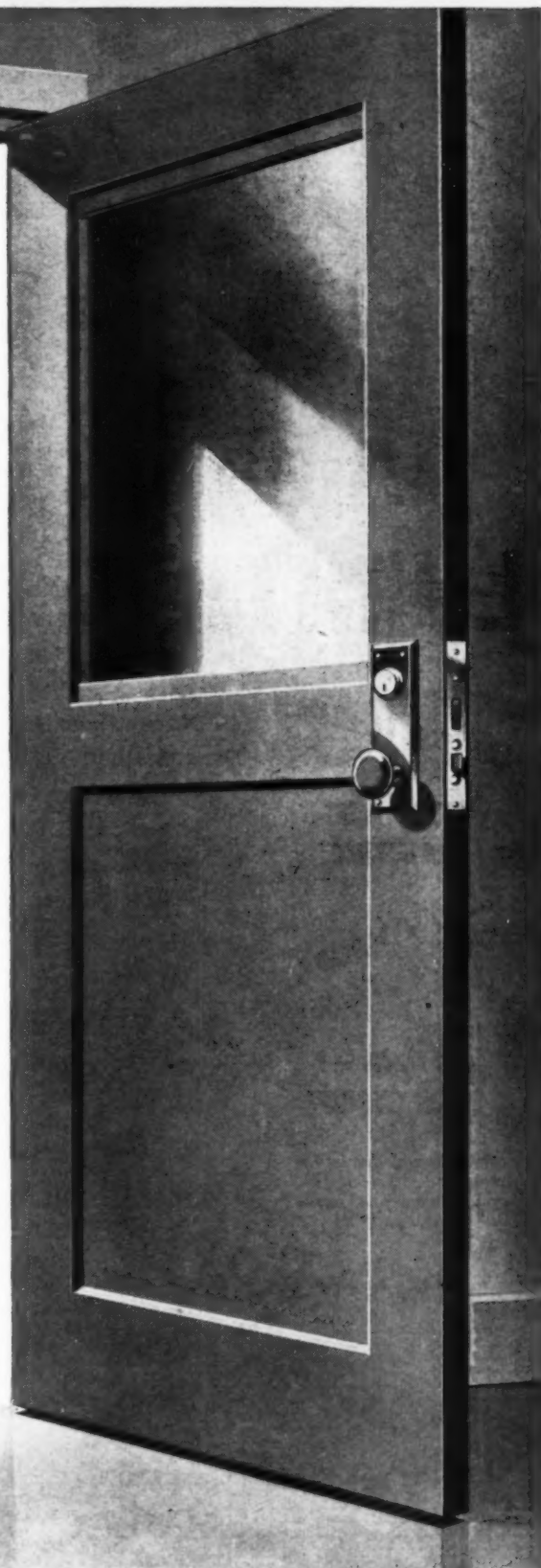
Standardization in these sizes enables your dealer to carry ample stocks. He can furnish doors right or left hand, with metal panel or glass, with or without muntin. Above sizes also available in pairs.

UNDERWRITERS' LABEL—Doors of same design are available with Underwriters' B Label.

For further information, call the nearest Fenestra office. Or write to Detroit Steel Products Company, Dept. AB-6, 2260 East Grand Blvd., Detroit 11, Mich:

Fenestra

**FIRESHIELD SWING AND SLIDE
METAL DOORS**



Costs less—Lasts a Lifetime!



Amazing New LUMITE Screening

LASTS A LIFETIME!

**NEVER NEEDS
PAINTING!**

**CAN'T CORRODE,
RUST OR STAIN!**

**AMAZINGLY
INEXPENSIVE!**

*Sold through hardware,
lumber and building supply
dealers and screen
manufacturers.*

No new house is really new if it isn't screened with LUMITE, the new, war-proved saran screening that's so tough and durable it will last as long as the house—costs less than any other quality screening. To make old houses modern, replace old screening with LUMITE that will never have to be replaced again.

Where salt air, moisture, or acid smoke are problems, LUMITE's the only answer. It can't rust, rot, corrode or stain in any weather or climate.

Write for samples to LUMITE DIVISION,
Chicopee Manufacturing Corp., 47 Worth
Street, New York 13, N. Y.

Specify by Name

LUMITE

Woven of saran

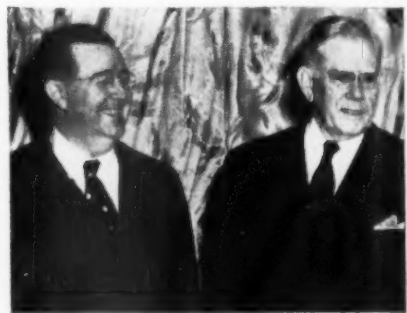


Dealer Review

(Continued from page 132)

officers names included E. O. Lightsey, Miley, S. C., first vice president; J. R. Bemis, Prescott, Ark., second vice president; W. T. Neal, Brewton, Ala., treasurer, and H. C. Berckes, New Orleans, La., secretary.

Principal topics considered at the meeting dealt with an expanded and more permanent southern pine industry through expansion of good forestry practices; increased

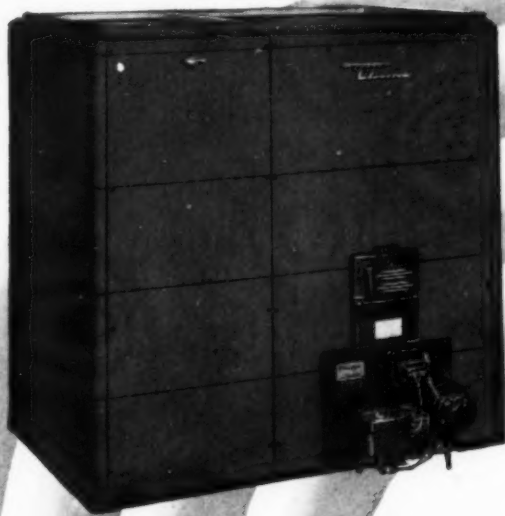


H. C. BERCKES, secretary, and H. M. Seaman, Houston, 1948 president of the Southern Pine Association

industrialization of the south through development of its forestry resources; closer cooperation between pulp, paper and lumber branches of the industry; more and better trade promotion backed by an accelerated program of mechanical efficiency, and an alertness in the field of transportation and labor information.

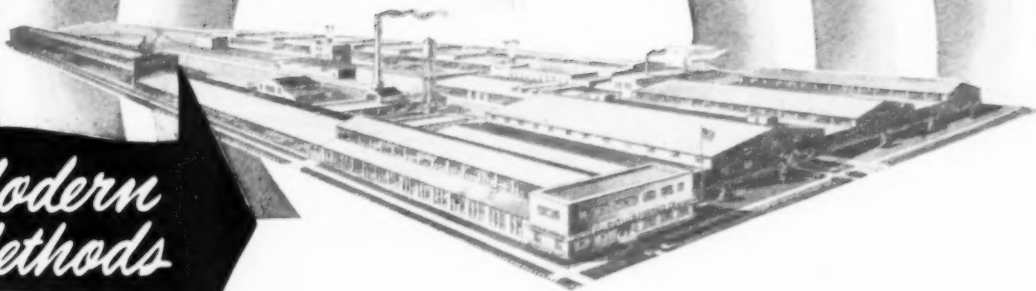
Southern California Dealer Met April 15 and 16

THE annual meeting of the Southern California Retail Lumber Association was conducted at the Biltmore Hotel, Los Angeles, April 15 and 16. An equipment and products exhibit in the Renaissance Room and the foyer of the ballroom was a feature of the meeting. A record attendance provided good audiences for a roster of speakers which included such nationally-known individuals as DeLoss Walker, New York City; R. A. Tobias, H. D. Hudson Manufacturing Co., Chicago; Dr. Carl Hancey of U. S. C.; Joseph R. Jones, Los Angeles banker; C. A. Rishell, of Timber Engineering Co., Washington, D. C.; James R. Lunke, public relations counsel of Seattle, Wash.; Ivan G. McDaniel, attorney, Los Angeles, and Col. Roswell P. Rosengren, past president of the Junior Chamber of Commerce of the U. S.



The Mueller Climatrol Type 202 Oil-Fired Winter Air Conditioner can be supplied with either a pressure-atomizing or a vaporizing-type burner. Both the 202 and its companion 201 Gravity Furnace (above) are convertible to AGA-listed gas-fired units at low cost.

*Modern
Methods*



... turn out Mueller Climatrol Products that you can recommend with confidence and pride

If you could make a trip through Mueller's modern factory, you'd know why you can always count on Mueller Climatrol to deliver the superlative comfort home-owners want. The Mueller factory covers a broad expanse of over 15 acres. Every square foot is devoted to the manufacture of quality products by the latest methods and equipment — to give modern homes truly modern heating equipment — and to give your clients extra-dollar value.

The heart of this great modern plant is the Mueller Climatrol engineering laboratory. Its job is to keep Mueller Climatrol products in the lead.

That standard has built the 91-year reputation of the Mueller name. That standard has kept Mueller Climatrol comfort a favorite in American homes.

Experience has taught you that you can chalk up another happy home every time a Mueller Climatrol is installed on your recommendation. That's because Mueller Climatrol delivers years of satisfying comfort with sound economy.

So recommend Mueller Climatrol for every job — it really pays! For additional information — write for bulletins today! *L. J. Mueller Furnace Co., 2016 W. Oklahoma Ave., Milwaukee 7, Wis.*

M U E L L E R

Climatrol

REG. U. S. PAT. OFF.

6-39



FOR GAS

FOR OIL

FOR COAL

THE NEW WELDWOOD FIREPROOF

...the only wood-faced door that gives all

Red Dowel

A red dowel, set into the stile edge band 4 inches from the top, permanently identifies all Weldwood Fireproof Flush Doors.

Fireproofed Edge Banding

Door is completely banded on all four edges with solid, fire-proofed hardwood that matches the faces.

Kaylo Core

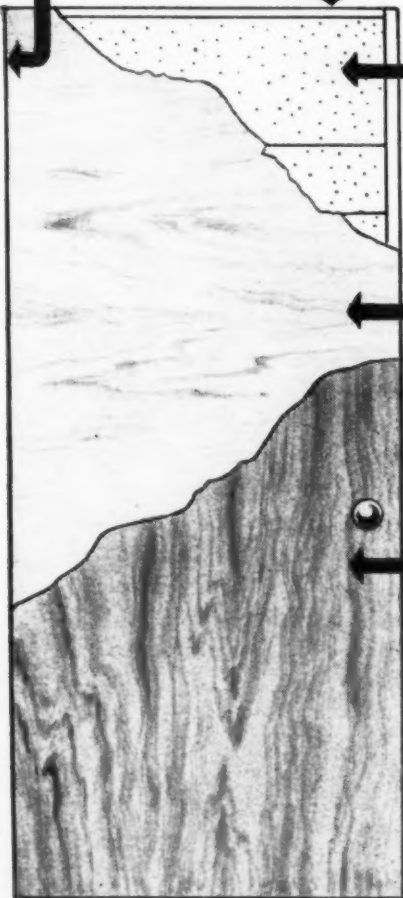
Core of the door is the new incombustible Kaylo mineral insulation, manufactured by American Structural Products Co., subsidiary of Owens Illinois Glass Company.

Cross Banding

1/16" veneer cross banding is bonded to Kaylo core with Tego waterproof resinous phenolic glue.

Face Veneer

At present, handsome Birch veneer forms the hardwood faces. A wide variety of other decorative woods available on special order.



This beautiful new Weldwood Fireproof flush door provides much-needed fire protection for office buildings, hotels, hospitals, schools, and other large public buildings. It is available in 1 3/4" thickness and in standard sizes.



Look at the superiority of Weldwood Fireproof Doors over conventional non-fireproof, 6-panel doors. After nine minutes and six seconds, panels of conventional door have burned through. In an actual building, the room behind the conventional door would already be a seething mass of flames.



Picture taken from the inside ten minutes after fire started shows absolute protection afforded by Weldwood Fireproof Door. After withstanding the intense fire for sixty minutes, the Weldwood Fireproof Door still prevented passage of fire, smoke, heat, gases and remained cool to the touch on the unexposed side.



This metal label is fastened to the top edge of every Weldwood Fireproof Door.

DOOR
these advantages

Weldwood Fireproof Doors bear the official label of the Underwriters' Laboratories (official testing agency for fire insurance underwriters).

They attained the one-hour fire rating by withstanding a free-burning fire for one hour, the ultimate temperature being 1700°. And after that, the impact of a 30-pound pressure hose stream, applied 20 feet from the fire side, for one minute.

Weldwood Fireproof Doors are a *must* for hospitals, schools, institutions, offices, and apartment buildings.

And these amazing doors are as *beautiful* as they are *safe*! They're dimensionally stable... stay straighter and are lighter in weight than other fireproof doors. The original cost is moderate, maintenance cost is practically non-existent, and Weldwood Fireproof Doors last for the life of the building.

Only the amazing new Weldwood Fireproof Door offers *all* those advantages! For additional information write to: United States Plywood Corporation, New York 18, N. Y.

UNITED STATES PLYWOOD CORPORATION

55 West 44th Street, New York 18, N. Y.

Distributing units in Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, Fresno, High Point, Los Angeles, Milwaukee, Newark, New York, Oakland, Philadelphia, Pittsburgh, Portland, Ore.; Rochester, San Francisco, Seattle. Also U.S.-Mengel Plywoods, Inc. distributing units in Atlanta, Dallas, Houston, Texas; Jacksonville, Louisville, New Orleans, St. Louis, Tampa. In Canada: United States Plywood of Canada, Limited, Toronto.

1. Increased Safety

The *only* wood-faced fireproof door which bears the Underwriters' label. All Weldwood Fireproof Doors are approved for class B openings.

2. Beauty

Because of their beautiful wood faces Weldwood Fireproof Doors harmonize perfectly with any decorative scheme. At present, Weldwood Fireproof Doors are faced with beautiful Birch veneer. A large variety of other handsome hardwood faces is also available on special order.

3. Durability

The Underwriters' Laboratories tested a Weldwood Fireproof Door for durability by mechanically opening and closing it 200,000 times. At the end of the test, the door was unaffected and still opened and closed perfectly.

4. Dimensional Stability

Weldwood Fireproof Doors are so dimensionally stable that we guarantee them against sticking in summer or rattling in winter due to any dimensional changes in the door.

5. Light Weight

At last... a really fireproof door that is *not* heavy or unwieldy. A child can open and close Weldwood Fireproof Doors with ease. A standard 3 x 7 door weighs approximately 80 lbs.

6. Vermin and Decay Proof

The mineral composition Kaylo core used in Weldwood Fireproof Doors is permanently resistant to fungus, decay, and termites. This superior and trouble-free door is made to *last*!

7. High Insulating Qualities

Another noteworthy characteristic of Kaylo insulation is its high insulating value over a wide range of temperatures. It is efficient against temperatures from freezing up to that of superheated steam.

8. Moderate Cost

Hospitals, schools, institutions, offices and apartment buildings cannot afford to be *without* the architectural beauty and absolute fire protection of Weldwood Fireproof Doors.

NEW NEW NEW

INCREASE YOUR SALES

INCREASE YOUR SALES

INCREASE YOUR SALES

with The New
HIGH-BAKED PLASTIC ENAMEL SURFACE
Miracle Walls by TYLAC

Our distributors and dealers everywhere report greatly increased sales with the new, Miracle Walls by TYLAC — the ultimate in pre-fabricated wall board coverings. This newer, tougher, more resilient, more flexible Plastic Enamel Surface has higher gloss, better adhesion, longer life, in fact — every feature of superior is built-in for the users pleasure and benefit.

Greater Sales Build Greater Profits. Write us for literature and sales-making dealer help program.

THE GREATEST POST-WAR DEVELOPMENT IN THE INDUSTRY.

TYLAC COMPANY MONTICELLO, ILLINOIS
 PIONEERS IN THE PREFABRICATED WALL PANEL INDUSTRY




Catalogs and HOW-TO-DO-IT INFORMATION

435—FENESTRA BUILDING PANELS—for Up-To-Date Houses is the title of a new folder issued by Detroit Steel Products Co., 3101 Griffin St., Detroit 11, Mich. Fenestra steel panels combine joist, bridging and sub-flooring. How they can be used with radiant heating is one of the subjects discussed.

436—KITCHEN PLANNING CATALOG—is available from American Kitchens, Avco Manufacturing Corp., Connersville, Ind. Printed in full color and profusely illustrated, the catalog offers a wealth of information on kitchen designing including suggestions for adapting their factory-built kitchen package to remodeled kitchens.

437—RADIANT HEATING BOOK—titled "Capture the Sun With B&G Hydro-Flo Heating" describes in concise simple language the application of forced hot water to all forms of radiant heating. Published by Bell & Gossett Co., Morton Grove, Ill., the book offers suggestions on applying B&G equipment to radiators, convectors, baseboard and radiant panels systems.

438—ASPHALT TILE FLOORING—for every type of installation is illustrated and described in an eight-page colorful brochure. Besides suggesting practical applications, the booklet features 22 patterns illustrated in color. Issued by the Mastic Tile Corp. of America, 153 West 57th St., New York 19, N.Y.

439—ELECTRIC WATER HEATERS—are the subject of a four-page folder released by the Automatic Electric Heater Co., Inc., Pottstown, Pa. The ten important

construction features of the units are pictured and described. Three models comprise the line: round, table top, and square. Each is pictured and specifications given.

440—ELECTRIC PLANTS—A new 16-page catalog prepared by D. W. Onan & Sons Inc., Minneapolis 5, Minn., describes low-cost electric power plants, tells when and where you need them, and offers advice on how to properly select a plant. Various models available are pictured. Important information on wattage requirements of appliances and motors is included.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department
 American Builder,
 105 W. Adams St., Chicago 3, Ill.

(June, 1948)

Please send me additional information on the following product items, or the catalogs, listed in this department:

Numbers _____

Name _____

Street _____

City _____ State _____

OCCUPATION*

*Please note that occupation must be stated if full service is to be given.



The Mighty Metal of the Air
takes a Sensational New Turn...

ALUMINUM GUTTERS

Rustproof, at about half the price of other rustproof materials... Immediate Delivery!

No painting, no soldering... no stain from rust or corrosion. Ample strength, to take a full drainage load. Yet these Reynolds Lifetime Aluminum Gutters are much lighter on your eaves... a 10-foot length weighs only about 3½ pounds! Complete with downspouts and accessories. Choice of Colonial box type or half-round design. See your local supplier now! Or write for literature.

Reynolds Metals Company, Building Products Division, Louisville 1, Kentucky

15,000,000 FEET ALREADY SOLD AND DELIVERED!

MADE BY THE WORLD'S LARGEST PRODUCER OF ALUMINUM BUILDING PRODUCTS: Clapboard Siding, Shingles, Sheet Roofing and Siding, Windows, Wall Tile, Reflective Insulation, "Alumi-Drome" (prefabricated utility building)

REYNOLDS PIONEERING MADE ALUMINUM COMPETITIVE... TAKE ADVANTAGE OF IT!

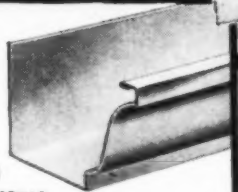


More than 15,000,000 feet already sold!

Write for illustrated A. I. A. File brochure!

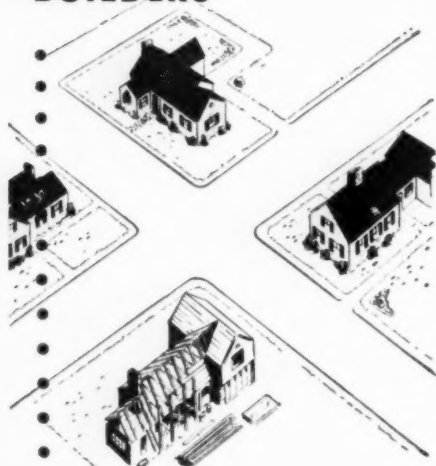
REYNOLDS METALS COMPANY, BUILDING PRODUCTS DIVISION
Louisville 1, Ky.—Offices in 32 principal cities

NEW!
O. G. STYLE



Cabot's Creosote Stains

FOR DEVELOPMENT BUILDERS



VARIETY

- Cabot's Stains come in a wide color range . . . clear
- brilliant hues to weathering browns and grays. You'll find a pleasing variety of colors for any number or types of houses.

PRACTICALITY

- Cabot's Stains are made with a high proportion of undiluted creosote oil, the best wood preservative known. This means that shingles, clapboards, or siding treated with Cabot's Stains will have long lasting protection from decay.

ECONOMY

- Cabot's Stains cost less than half as much as good paint
- . . . are quick and easy to apply . . . won't peel or blister, even on green lumber!

Write Today for color cards and complete information.

Samuel Cabot, Inc.

2225 Oliver Building
Boston 9, Mass.



How- To- Do-It

(Continued from page 118)

This article, the second in a series, gives recommendations of the Asphalt Roofing Industry Bureau for applying giant individual asphalt shingles

Dutch Lap Application

GIANT individual asphalt shingles usually are applied by the Dutch lap method when re-roofing over an old roof surface. They should be used only on roofs having a vertical rise of 4 inches or more for each horizontal foot.

Before shingle application begins, the old surface must be prepared for the new covering. In the case of old wood shingles, this preparation includes removing loose and protruding

material when dormers or other obstructions interrupt shingle courses; chalk lines will insure that courses above an obstruction will line up properly with those to the sides of it.

The nails should be large-headed, sharp-pointed, hot galvanized wire nails with barbed shanks. When application is over old wood shingles, nails should be 1 3/4 inches long; over old asphalt shingles, 1 1/2 inches long. Application of shingles can be

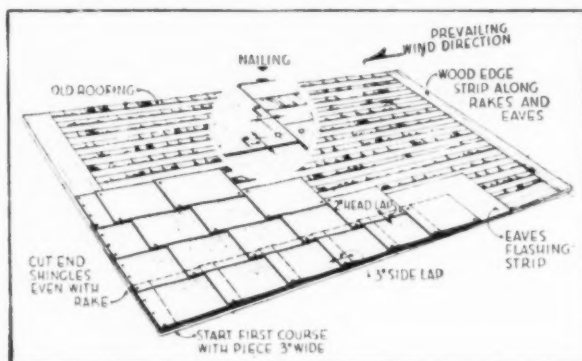


FIGURE 1.—Dutch lap application of giant individual asphalt shingles

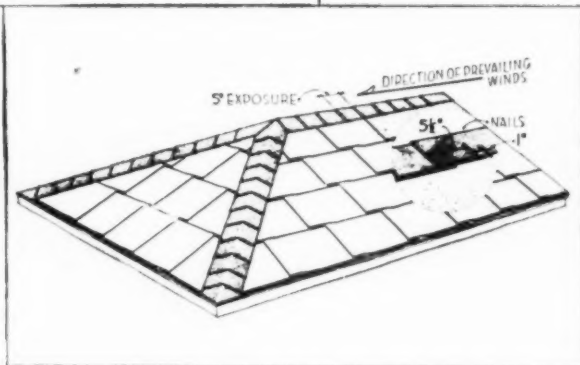


FIGURE 2.—Hip and ridge shingling with Dutch lap application

nails, replacing missing shingles, fastening loose shingles, splitting curled shingles and securing the segments, the use of "feathering strips," and sweeping the old roof clean.

After preparation of the old surface, an "eaves flashing strip" is applied. This consists of a strip of mineral surfaced roll roofing, laid to overhang the eaves from 3/8 to 1/2 inch and extending up the roof to a point at least 6 inches beyond the interior wall line.

Horizontal and vertical chalk lines always should be used for aligning roofing. They are especially impor-

tant when dormers or other obstructions interrupt shingle courses; chalk lines will insure that courses above an obstruction will line up properly with those to the sides of it.

Each shingle is secured with two nails and one fastener. When laying from left to right, nails should be placed in the upper left corner and the lower right corner. Nail positions are reversed when laying from right to left.

The lower unnailed corner is secured to the overlapped portion of the adjacent shingle in the same course with a galvanized wire staple or copper clip, as furnished by the manu-

(Continued to page 142)



**Single houses or
Multiple housing . . . both
are equally well served with the new
JANITROL TRIPLE SERVICE SYSTEM**



By providing all household needs for hot water and heating from a single Janitrol Unit, you gain many advantages.

Installation is simplified, costs held to a minimum. Extremely compact, units can be installed anywhere, no basement required. A complete factory tested package, proved in hundreds of applications.



For apartment buildings, a single Janitrol will serve 3 to 6 apartment units. Tenants can individually control the temperature of their apartment through a system of zone control. Oil or Gas-Fired the units are completely automatic, require no daily attention.

*3 way
Service*



JANITROL

TRIPLE SERVICE

HOT WATER HEATING SYSTEM



**Hot Water for
Comfort Heating**

*Gas-Fired Units and all
controls are fully A.G.A.
approved and rated.*

**Hot Water at High
Temperature for
Kitchen or Laundry**

*The unit also provides a plenti-
ful supply of high temperature
water for the laundry and
dishwashing.*



**Hot Water at Moderate
Temperature for
Shower and Lavatory**

*There's a ready supply of
tempered hot water for the
entire family's personal use.*



Janitrol

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BUILDERS! WRITE TODAY FOR COMPLETE SPECIFICATION DATA AND NAME OF LOCAL QUALIFIED JANITROL DEALER

THIS BOOK
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Chromtrim
"Trim-it-Yourself"
METAL MOULDINGS
to Homemakers
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Powerful national advertising... constant publicity... and well-timed promotion are selling Chromtrim's "Trim-it-Yourself" metal mouldings faster than dealers all over the country can reorder. Chromtrim's coordinated campaign is building up an overwhelming customer demand for these handy, decorative mouldings — a demand that will pay off in extra sales for you. Get your share of this profitable business by cashing in on Chromtrim's 8/60 Deal now! Join the more than 10,000 dealers who are selling Chromtrim to their customers in convenient pre-wrapped packages for a thousand household uses.

YOU GET MAXIMUM PROFITS AT A
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Here's what it offers you: Ten 6 ft. lengths of each of 8 different consumer-tested "Trim-it-Yourself" metal mouldings, pre-packaged and ready for sale. PLUS: 1. The compact, colorful (24" x 16") Chromtrim "Silent Salesman" merchandiser. 2. Eight metal snap-on price tags. 3. Metal dispensing tray and nails. 4. Supply of 100 consumer instruction folders. 5. Free copy of "Trim Ideas" for home use. 6. Three color, 11" x 14", display card. 7. Window Display.

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Please rush full information on Chromtrim "Trim-it-Yourself" special 8/60 merchandise deal, including Dealer Mat Service data and your free copy of "Trim Ideas". I understand there's absolutely no obligation on my part.

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FIRM _____

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CITY _____

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R. D. WERNER COMPANY, Inc.

295 Fifth Avenue
New York 16, N. Y.

Manufacturers of

Chromtrim

In Canada
R. D. WERNER COMPANY LTD.
PORT BALMORIS, ONT.



How- To- Do-It

(Continued from page 140)
facturer. Never nail this corner
down.

Dutch lap application of giant individual shingles is shown in Figure 1. For left to right application, the first course is started at the lower left corner of the roof surface with a piece of shingle 3 inches wide and 12 inches high. This piece is fastened with four nails, one in each corner, 1 inch in from each of the sides forming the corner.

The first full size shingle is placed in the corner between eaves and rake so that it covers the 3-inch-wide section and is flush with the rake and with the eaves flashing strip. The course is completed by laying full size shingles with their 16-inch dimension parallel to the eaves, each shingle lapped 3 inches over the preceding shingle and fastened as specified.

The second course is started with a shingle from which 3 inches has been cut off, placing it to lap 2 inches over the first course, flush with the rake edge and touching the vertical exposed edge of the second shingle in the first course. The course is continued with full size shingles.

The course is continued with full size shingles, always maintaining the 2-inch headlap and the 3-inch sidelap. Succeeding courses are started and continued in the same manner, except that the amount cut off the first shingle varies. The first and last shingle in each course is trimmed off even with the rake line.

Although most asphalt roofing manufacturers make special hip and ridge shingles, regular Dutch lap shingles can be used for this purpose.

When using regular shingles, bend each one down its center in order to have equal exposure on each side of the hip or ridge. In cold weather, warm shingle lightly before bending. Fasten each shingle with a nail on each side of the hip or ridge, 5½ inches from the exposed end and 1 inch from the side edge.

How to Frame a Typical Roof Three Different Ways

THE following roof framing suggestions are offered by Raymond R. Neal, Phoenix, Ariz.

(Continued to page 144)

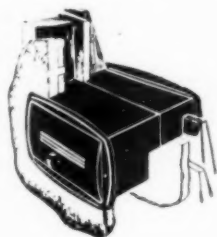
BUILDERS- Add Sales Appeal to Your Homes With . . . LEIGH BUILT-IN MAIL BOXES!

These attractive mail receivers are actually less expensive
than ordinary outside hanging mail boxes

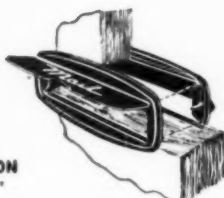


OUTSIDE DOOR

Note smart styling and
heavy gauge construction



for
WALL
INSTALLATION
STYLE "W"



for
DOOR
INSTALLATION
STYLE "D"



LEIGH Built-in Mail Boxes are styled and designed to add beauty
and convenience to any home — old or new.

Made in two styles — Style "D" (for door installation) quickly
installed by cutting slot through door. Hood covers opening on inside
of door.

Style "W", for wall installation consists of outside door, adjustable
tin box and inside door.

Outside doors can be had in either heavy gauge steel or aluminum.
Finish is dull brass enamel.

See your nearest dealer, or send for Catalog 47-L.



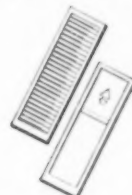
A Product of-

AIR CONTROL PRODUCTS, INC.
Coopersville,
Michigan

OTHER



ORNAMENTAL
METAL SHUTTERS



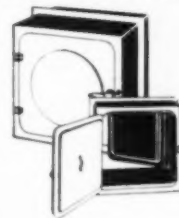
DUST CHUTES



VENTILATORS



PACKAGE AND
MILK RECEIVERS



CLOTHES CHUTE
DOORS



CEILING
VENTILATORS



**For Sure Satisfaction,
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Time...**



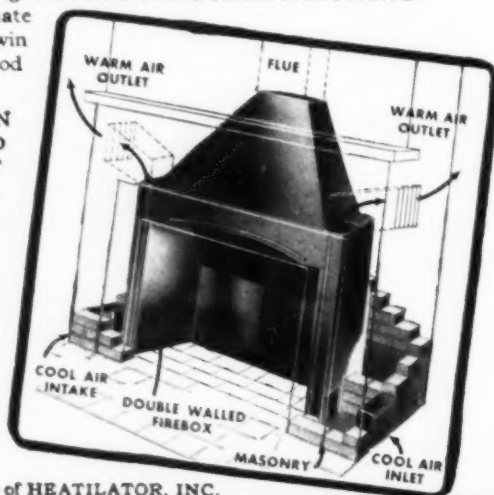
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HEATILATOR FIREPLACES are easier to build . . . require a minimum of time, labor and material. The Heatilator is a complete fireplace form, with smoke dome, throat, downdraft baffle, and damper all built-in. You just place the Heatilator Unit in position and lay masonry around it—Heatilator's scientific design makes the fireplace right every time.

HEATILATOR FIREPLACES assure customer satisfaction. The purchaser is always pleased with a fireplace that draws properly and does not smoke . . . and is delighted with the extra benefit of *circulated* heat. You not only eliminate fireplace complaints—you win actual boosters through good fireplaces.

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BY OVER 20 YEARS'
SUCCESSFUL USE ALL
OVER THE U.S. AND
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Syracuse 5, N. Y.



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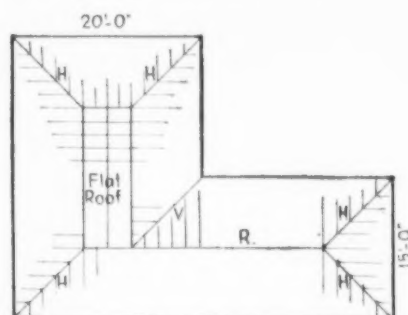
HEATILATOR FIREPLACE



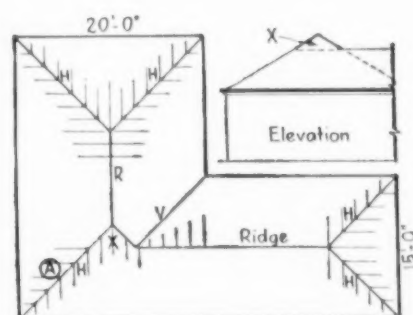
How- To- Do-It

(Continued from page 142)

Where the projecting wing is wider than the main body of the house, as the illustrations here indicate, there are three satisfactory ways to construct the roof.



In this drawing, the difference in the height of the respective roof slopes, is taken care of with a flat deck for the wing, which is flush with the ridge of the main roof. The flat deck is sloped slightly to allow for drainage. The span of the main roof can be used for figuring all hips, valleys and common rafters.



In the above drawing, all rafters and slopes of the main roof and wing are true to pitch, extending to respective ridges. The normal slope of a portion of the main roof at "X" will extend beyond the ridge line, thus forming a small hip to meet the difference in height of the two ridges. Special framing will be required at this point.

The problem of framing at the intersection of the two roof ridges can be simplified by cutting the hip rafter marked "A" the same as the hip rafter for the 20 foot span.

This next drawing shows the
(Continued to page 146)

DURAPLASTIC

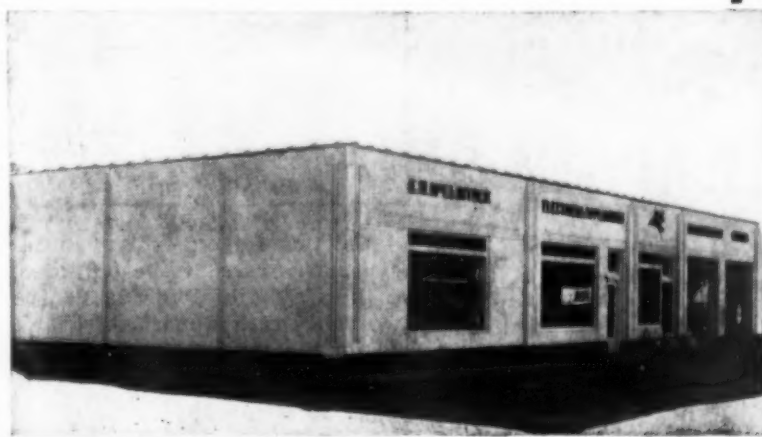
IS EXCELLENT FOR FLOORS

Concrete made with Atlas Duraplastic air-entraining cement is easier to place and finish because it is more plastic and workable... more cohesive and more uniform.



IS HIGHLY ADAPTABLE FOR STRUCTURAL WORK

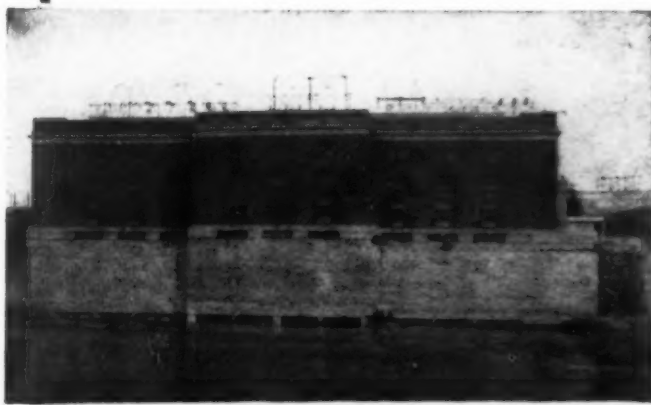
For example, this building has a fine stucco finish—made with Duraplastic cement. Stucco, slip-form, gunite, paving, structural or mass concrete—Duraplastic provides the proper amount of entrained air needed for satisfactory field performance.



AND IS MORE DURABLE under tough conditions

Duraplastic concrete provides added protection against exposure and the effects of freezing and thawing weather. It is more durable, yet no additional materials are needed—merely the same good workmanship regularly employed. Duraplastic costs no more than regular cement. It complies with ASTM and Federal specifications.

Write for further information. Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, N. Y.



OFFICES: Albany, Birmingham, Boston, Chicago, Cleveland, Dayton, Des Moines, Duluth, Kansas City, Minneapolis, New York, Philadelphia, Pittsburgh, St. Louis, Waco.

AB-D-63

ATLAS DURAPLASTIC

AIR-ENTRAINING PORTLAND CEMENT

MAKES BETTER CONCRETE AT NO EXTRA COST



"THE THEATRE GUILD ON THE AIR"—Sponsored by U. S. Steel Subsidiaries—Sunday Evenings—ABC Network

NEW!

FASCO AUTOMATIC KITCHEN VENTILATOR



NOW AVAILABLE IN 10" SIZE, TOO!

Regardless of whether the homes you are building have large, average, or small size kitchens, built with standard, thick, or thin wall construction . . . you can now get the new FASCO ventilators to keep them cool, clean and comfortable. Their many quality advantages and amazing low price enable you to add much to the sales appeal of your homes for so little."

****8" Models Sell Retail For Only \$24.95 Incl. Tax.**
(SLIGHTLY HIGHER IN THE WEST)

NO OTHER popular-priced ventilator gives as many Quality Advantages

A PRODUCT OF

FASCO

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F. A. SMITH MANUFACTURING CO., INC., ROCHESTER 2, N. Y.

Gentlemen:

AB-3

Please send complete information on the New FASCO Automatic Kitchen Ventilators.

Name _____

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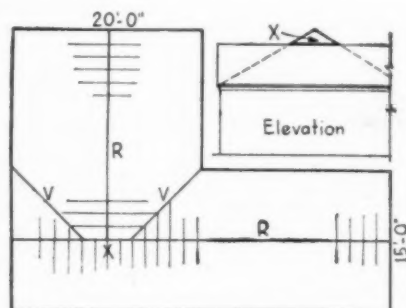
State _____

WRITE FOR COMPLETE INFORMATION



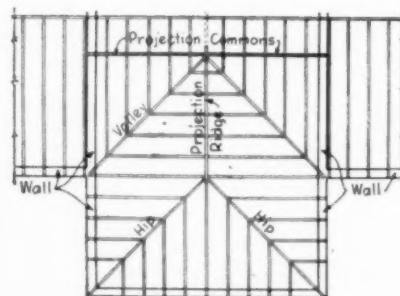
(Continued from page 144)

roof framed in a gable treatment for the projecting wing and main roof. A small gable end, marked "X," is formed at the intersection



of the two ridges. This arrangement takes care of the difference in the height of the ridges. The two valley rafters marked "V" are cut for the 15 foot span.

How to Support Valley Rafters



THE drawing above illustrates an example of roof framing, as it can be applied to a bay projecting from the main walls of a house. To provide support for the valley rafters in the framing of the bay, a common rafter is placed under the valley rafters. This rafter extends from the side walls on both sides of the bay to the ridge line. Thus, needed support is given to the valley rafters to tie them together with the balance of roof framing.

An alternate means of support for valley rafters may be obtained from a partition placed close to the intersection of the valleys. Extend the common rafter from the partition to form the cantilever beam, which provide the necessary support.

(Continued to page 148)

FOR *that* HOME



THORN ALUMINUM WINDOWS

A wide choice of standard types and sizes in both Double-hung and Casements provide just the right window in the right place.

Builders find the extra deep jamb of the Thorn Double-hung Window fits orthodox opening construction. It is economical to install, requiring no special skill and less plastering than any other type.

Thorn Double-hung Windows are completely assembled at the factory and fitted with built in stainless steel weatherstripping, and contain features found only in the most expensive windows.

These windows are really built for the finest, but priced for the most modest.

J. S. THORN COMPANY PHILADELPHIA 32, PENNA.

DO THESE

10

JOBS AT LOWER
COST...WITH A

K&E BUILDERS' TRANSIT-LEVEL

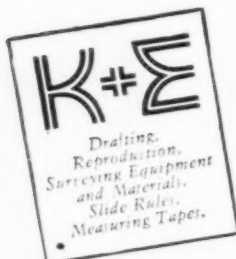


YOU can do all of these jobs faster, more accurately and at lower cost with a K&E BUILDERS' TRANSIT-LEVEL. This easy-to-use instrument cuts out old fashioned, time-taking methods and streamlines the work. For instance, chalk line, line level, plumb bob and tape mean that your building mechanics must be constantly stopping. Time is lost from laying bricks, setting steel, carpentering—the jobs your men are hired to do.

So simple that any intelligent man can use them by following the instruction booklet, these instruments are built for years of rugged service, yet they retain their accuracy. Their quality is guaranteed by the K&E reputation and experience of 80 years of making equipment and materials for the engineers of America.

For details of the No. 5155 K&E BUILDERS' TRANSIT-LEVEL (a transit and a level in one instrument), the No. 5153 K&E BUILDERS' LEVEL or K&E Leveling Rods, write to your nearest K&E Distributor or to Keuffel & Esser Co., Hoboken, N. J.

Easy-to-follow instructions with each instrument.



KEUFFEL & ESSER CO.

EST. 1867

NEW YORK • HOBOKEN, N. J.

CHICAGO • ST. LOUIS • DETROIT • SAN FRANCISCO
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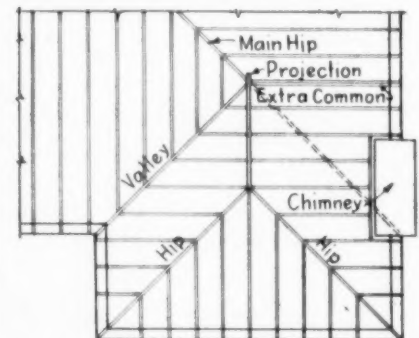
1. Measure from property lines
2. Stake out buildings
3. Lay out angles
4. Plumb vertical lines
5. Level up excavations for foundations
6. Set grades for thresholds, sills, lintels, etc.
7. Set slopes for drainage or sewage
8. Set stakes for grading
9. Determine amounts of cut and fill
10. Set concrete forms to line and grade



How-To-Do-It

(Continued from page 146)

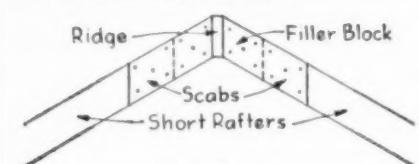
How to Frame Roof to Meet Special Requirements



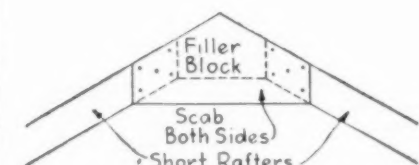
IN THIS drawing, a projecting bay and fireplace break the normal flow of the roof lines of the main house. The ridge rafter of the bay intersects and extends about four inches beyond the main hip rafter.

An extra common rafter is placed against this intersection and extended down to the wall plate. The common rafter provides the necessary support for the main hip rafter that has been cut off to accommodate the projecting bay.

How to Save Rafters That Are Cut Too Short



WITH RIDGE



WITHOUT RIDGE

WHEN rafters are cut too short, filler blocks are added and additional scabs placed over the filler blocks and the short rafters.

In the second method, a single piece is scabbed across both joints on each side. The filler block thus forms the point of truss



Cotton Insulation

Phenomenal increases in production and sales of Cotton Insulation... from 55,000 pounds in 1940 to 14,316,000 in 1947... prove its growing preference with home owners, builders, distributors and dealers throughout America!

Light, clean, easy to install... efficient, economical, flame-proof... Cotton Insulation is the best insulation value on the market! You'll find it easy to sell... generations of Americans have looked to Cotton as the fiber for long wear, for comfort, for ever-dependable service.

Get the complete story of the many more INSIDE advantages Cotton Insulation offers you and your customers. Send now for your free copy of "The INSIDE Story of Cotton Insulation."

NATIONAL COTTON COUNCIL OF AMERICA
COTTON INSULATION ASSOCIATION

SELL MORE INSULATION JOBS AT MORE PROFIT PER JOB

Turn prospects into strong booster-customers—sell rings around competition—learn "The INSIDE Story of Cotton Insulation." Pass it on to employees—use it for increasing your insulation sales and profits.

WRITE for
your copy now—

IT'S FREE!



National Cotton Council, Dept. B
Box 18, Memphis 1, Tennessee

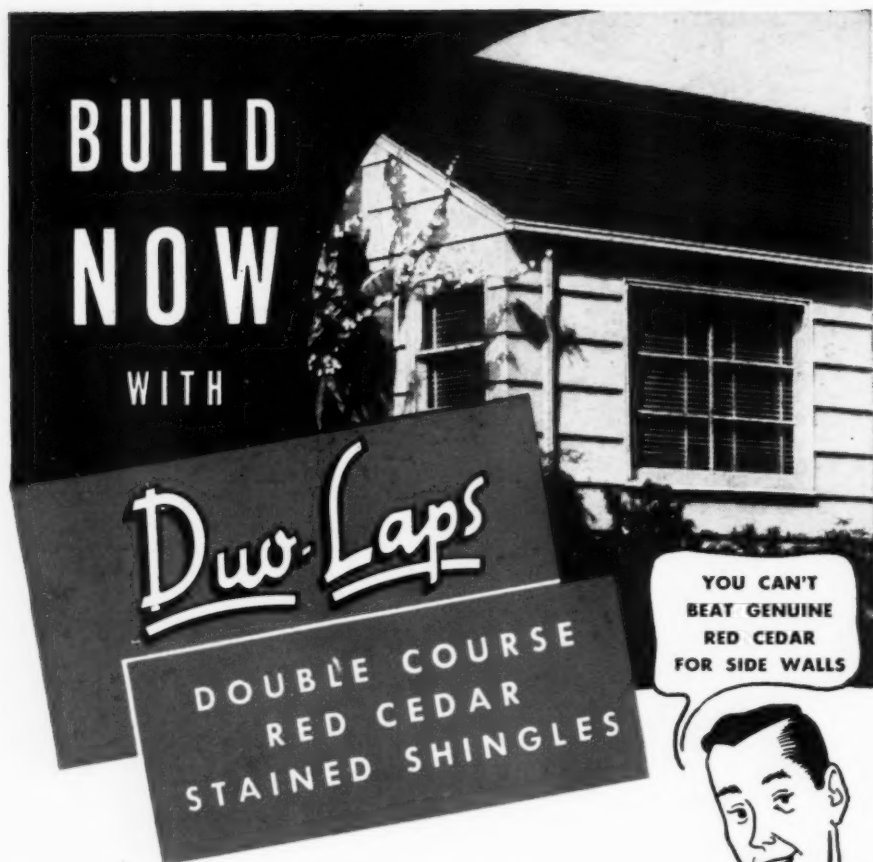
Please send "The INSIDE Story of Cotton Insulation."

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Address

City State





**BUILD
NOW**
WITH

Duo-Laps

**DOUBLE COURSE
RED CEDAR
STAINED SHINGLES**

YOU CAN'T
BEAT GENUINE
RED CEDAR
FOR SIDE WALLS

The demand's for broad siding. With Duo-Laps, you get the beauty of wide, expensive, Red Cedar siding with deeper horizontal shadows, at a fraction of usual cost. Build for beauty and instant sales with Duo-Laps double-course shingles, laid with full 12" or 14" exposure over solid or spaced sheathing.

FASTER, EASIER TO APPLY

Duo-Laps are dipped and stained by hand, butted, squared and tapered and require no painting. The genuine Red Cedar of Duo-Laps is unexcelled as insulation — keeps homes warm in winter, cool in summer. Selection of eight colors. Get two shingles in one (Stained No. 1 Red Cedar top course and rugged, genuine Red Cedar undercourse) with cost-cutting Duo-Laps.

WRITE FOR YOUR FREE COPY OF THE NEW DUO-LAP COLOR FOLDER AND THE NAME OF THE DUO-LAP DEALER NEAREST YOU.

THE American
STAINED SHINGLE CO.
GENERAL OFFICES COR. SPRUCE ST. AND DENNISON AVE.
COLUMBUS 8, OHIO

POWER TOOL and EQUIPMENT MANUFACTURERS' NAMES

Omitted from the May Issue

SEVERAL manufacturers of labor-saving power tools and equipment were unintentionally omitted from the roster published on page 75 of the May issue. They are:

Skillsaw, Inc., 5033 Elston Ave., Chicago, Ill.

Sterling Tool Products, 1334 Milwaukee Ave., Chicago, Ill.

Symonds Clamp & Manufacturing Co., 4261 W. Diversey Ave., Chicago, Ill.

R. G. LeTourneau, Inc., Peoria, Ill.

General Electric Names New Division Manager

GENERAL ELECTRIC has named F. C. Kurung manager of manufacturing for its automatic heating equipment division of the air conditioning department, G. R. Prout, vice president and general manager of the G. E. department, has announced.

House and Lot for \$7,700

(Continued from page 75)

was the closing fee and insurance which amounted to \$125. The monthly payments, including interest, principal, insurance and taxes, are \$49 per month.

"There has been much publicity about private enterprise building rental housing," Graves told us, "but if you will stop to analyze this particular development, it might be called a rental project as the down payment of \$125 is very meager, and the monthly payments much lower than a house such as this would rent for, if available.

"If this house were to be rented, it would bring \$65 or \$70 per month. By purchasing a home on this easy payment plan, it would seem that the veteran would have more pride in keeping the house and premises in good condition and would thus be a better citizen.

"If financing were to be continued in the same manner as last year, many more houses would be built, and the housing shortage would be whipped. Today, houses are being sold as rapidly as they are being completed, and we feel that there is a large enough demand to take up all that can be built for the next several years. With ample financing and less government interference, private industry can do the job necessary to provide ample and low-cost housing."

BIGGEST INSULATION NEWS IN 20 YEARS



CELLULITE-SILVERCOTE*



1. Reflects Radiant Heat 2. Blocks Conduction and Convection

UP TO 70% MORE EFFICIENT

Greatest insulation development in 20 years, patented Cellulite-Silvercote combines two types of insulation in one new, doubly effective insulation. Unlike other insulations, which work only one of two ways, Cellulite-Silvercote works *both* ways:

1. Cellulite-Silvercote has a filler of fluffy, fibrous Cellulite that's up to 36 per cent more effective than other insulations in preventing heat transfer by conduction and convection.

2. Cellulite-Silvercote has two non-corrosive Silvercote membranes that reflect radiant heat with unsurpassed, permanent efficiency.

This new duplex action means up to 70 per cent greater effectiveness than any other insulation can give... the greatest insulation value on the market... a K-Factor of 0.12.

Sturdy vapor barrier exceeds FHA requirements. Gilmanweld nailing flanges are extra strong to speed and simplify installation. Compact packaging of rolls means easy handling.

Cellulite-Silvercote is flame-proof, moisture resistant, pest repellent; contains no irritating fibers, odors or dust... is permanent — can't sag, settle or pack.

Write today for full information on Cellulite-Silvercote's greater values for you and your

customers. Cellulite sales have tripled in three years. It will pay you to ride the Cellulite-Silvercote bandwagon.

Wholesalers — Distributorships now available in some valuable territories. For details write or phone Main Office in Gilman, Conn., or sales offices in New York, Chicago, Tacoma, San Francisco or Los Angeles.

THE GILMAN BROTHERS COMPANY
55 Richard St., Gilman, Conn.

Please send me, without obligation, full information about Cellulite-Silvercote.

Name _____

Firm _____

Street _____

City _____ Zone _____ State _____

Please Check One:

☐ Wholesaler ☐ Dealer (Retail) ☐ Builder ☐ Architect

*Cellulite is a registered (U.S. Pat. Off.) trademark of The Gilman Brothers Company; T. M. "Silvercote" Reg. U.S. Pat. Off. by Silvercote Products, Inc.

Versatile



In construction products **CECO ENGINEERING**

is the word for

CECO STEEL CASEMENTS

For every home, no matter what the style or price, there is a Ceco casement that is just right. They work better than any other type of window—can't stick, warp, or swell. They look better, too—muntins are always at the same height, open or closed. Trim frame lines increase the light area. Controlled ventilation scoops up stray breezes. Precision engineering means tighter weatherseal. And they offer another convenience—screens and storm windows are put up from inside . . . no ladders to climb. The cost? Lowest of all, installed. Ceco steel casements are equally effective in all types of construction—solid masonry, brick veneer, frame, concrete block or any other material.

CECO STEEL PRODUCTS CORPORATION

GENERAL OFFICES: 5701 W. 26th Street, Chicago 50, Illinois

Offices, warehouses and fabricating plants in principal cities

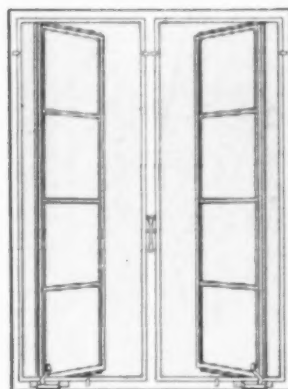
See Ceco catalogs in Sweet's Architectural File or send for free descriptive literature



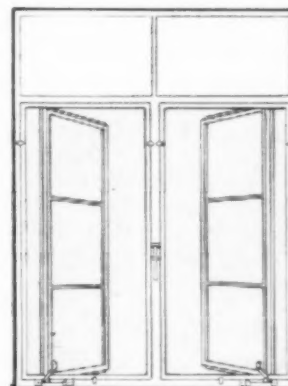
**CECO
STEEL**

makes the big difference

Two more of the many
architectural effects with
Ceco Steel Casements



This popular casement, type 2424, is used in all styles of residences, from the smallest to the largest. Immediately available from Ceco warehouses coast to coast. Window dimension is 3'1" wide x 4'2 3/4" high. Shown with screens.



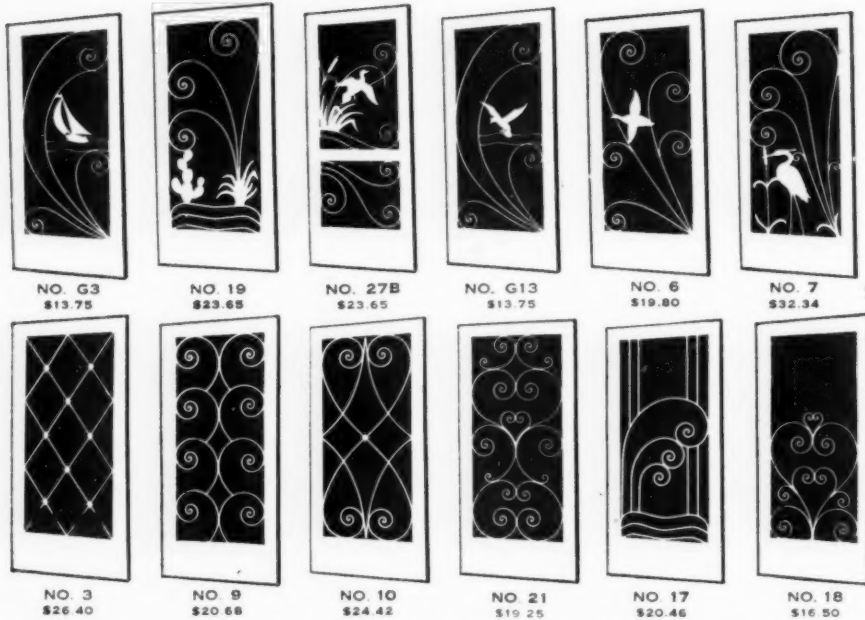
Here is another popular type, 2423. Notice the fixed transom above the ventilators to help with drapery problems. Window dimension is 3'1" wide x 4'2 3/4" high. Illustrated with screens. In addition, many other types and sizes are available.

Partial list of other Ceco Products

STEEL JOISTS AND ROOF DECK
METAL WINDOWS AND DOORS
METAL FRAME SCREENS • ALUMINUM
STORM PANELS • METAL LATH AND
ACCESSORIES • HIGHWAY PRODUCTS
CORRUGATED ROOFING • LOUVRE
VENTILATORS

ORNAMENTAL IRON

BY *Coffman*



Amounts shown are contractor prices F.O.B. Orlando, Florida.

DECORATIVE GRILLES

Make Homes More Attractive

Any house can be "dressed up" for maximum "eye appeal" with Coffman hand-wrought screen door grilles. The cost is small. The beauty added increases the value of the house. Coffman grilles are practical, too—they save the screen, strengthen the frame. They are easy to buy; instantly available from stock; obtainable through building supply dealers.

Hand-Wrought Quality with Standardized Stock Economy

Despite the high quality of these hand-wrought iron grilles with their forge drawn points, graceful lines, and beautiful spirals—they are standardized for economy. Just check outside dimensions of your door and dimensions of your inside screen opening with stock size grille table below. For two panel doors or special sizes, information will be sent gladly upon request.

Typical Grille Sizes

Dimensions of Door O.A.	Grille Sizes S.P. Doors
2' 8" x 6' 8"	24 3/4" x 65"
3' 0" x 6' 8"	28 3/4" x 65"
3' 0" x 7' 0"	28 3/4" x 69"

Look for the forge drawn tips on the inner ends of scrolls—this is the mark of quality in Coffman ornamental iron.

DEALERS

Tear out this ad and use it as a catalogue sheet for your files. It presents briefly the popular Coffman line of screen door grilles. There is a wide market in the small home field for Coffman low cost hand-wrought ornamental iron. Porch posts, railings and brackets as well as grilles are in demand. If you are not now stocking this line, be sure to write for information.

Write for Catalogue of Designs, Sizes, and Prices.
Address Department AB

The R. I. Coffman Co. Inc.
ORLANDO, FLORIDA
ESTABLISHED 1925

MANUFACTURERS OF "Complete Builders Line" OF HAND-WROUGHT ORNAMENTAL IRON

American Central to Increase Allocation of Kitchens for New Homes

AT THE recent 50th anniversary observance and distributor convention in Connersville, Ind., American Central Division-Avco Manufacturing Corp. announced a program intended to provide a major contribution to the construction of more new homes. Charles L. Stoup, sales manager for products, revealed that starting in September, 50 per cent of the division's greatly increased output would be allocated to new homes construction. This will amount to some 50,000 kitchens valued at \$25,000,000 annually. These kitchens will be sold through regular American Central distributors.

All orders for this type of new home business must be certified builders' orders and must include such information as the name of the builder involved, building project location, number and type of kitchens to be installed and delivery requirements.

"Orders specifying September and October deliveries," Stoup explained, "must be in our offices now as that is the time when we must purchase our September and October steel. November, December and January builder requirements must be in our hands by August 1."

Savings and Loan League Advocates Emphasis on Loans for Economy Houses

A NATIONWIDE drive to concentrate available credit on the building of new low-priced homes was launched in May by the United States Savings and Loan League.

Announcement of the program was made as the League's executive committee wound up its regular spring meeting. Chairman of the committee is Morton Bodfish, Chicago.

A statement of policy drafted by the executive committee called upon the League's 3,608 member savings and loan associations to channel from one and a half to two billion dollars in 1948 into the exclusive financing of new homes priced from \$4,000 to \$10,000.

The committee's statement said that up to 500,000 new homes in this price range may be provided for by this "preferential financing."

It called for preference to loan applicants who wish to build homes under \$10,000. This would attack housing inflation, the committee said, by concentrating more of the home building in the price range most needed.

"This increased supply of housing is the only effective remedy for high prices," the committee stated.

(Continued to page 156)

NATIONAL heating products— a family of PROFIT-BUILDERS

For easier sales, more and quicker profits, tie your heating activities to

the NATIONAL line—a family of leaders in customer acceptance.

NATIONAL CAST IRON HEAT EXTRACTORS

The features your customers want most—economical heating, long, efficient service, smart appearance, easy convertibility to any fuel—are the engineered results of over seven years of intensive research.



"200" SERIES. Big boiler performance for homes of medium size and some commercial installations.



"100" SERIES. Smart and compact for small home installation in kitchens, basements or utility rooms.



"300" SERIES. For larger homes, small apartments and various commercial installations where more heat is needed.

"400" SERIES. Designed for very large installations where plenty of heat is required to serve many purposes.



NATIONAL STEEL BOILERS

Their economy of first cost . . . installation . . . operation . . . and upkeep offers outstanding value for residential and commercial heating. Construction and performance meet or exceed all requirements of recognized authorities and codes.



18" and 23" Series Steel Boilers are available in 5 sizes with oil or gas firing for small and medium size residential installations.

For larger homes, smaller apartments and small commercial buildings, 26", 29" and 39" Series Steel Boilers are designed for oil, stoker or gas firing.



And for still larger heating jobs, 16 sizes of Commercial Steel Boilers, designed for hand, stoker or oil firing, and ranging to 35,000 square feet of steam radiation, carry on the tradition of National engineering excellence.

... Everything you need!

No matter what size or type of building, there is NATIONAL equipment to heat it adequately, correctly. NATIONAL Oil Heating Units in cast iron or steel, Gas Boilers, Unit Heaters, Art Radiators, Aero Convectors or Fin-Tube Convectors, all carry the

well known symbol of superiority—the NRC trademark.

For complete information call your nearest NRC district office or write to The National Radiator Company, 221 Central Avenue, Johnstown, Pa.



The NATIONAL RADIATOR Company

JOHNSTOWN, PENNSYLVANIA



LET a good worker up off his knees and onto his feet. Give him a fast-cutting Stanley W8 Safety Saw...and stand back. See the job that was just crawling along really get going.

The W8 has a heat-treated aluminum alloy base for light, easy handling. Duplex handle, exclusive Stanley feature, with two independently operating trigger type, double-pole switches, provides comfortable grip in any position. Simple wing nut adjustment for depth of cut. Capacity: $2\frac{3}{4}$ ". Tilting base permits bevel cuts up to $21\frac{1}{16}$ " at 45° angle. Combination rip and crosscut blade. Sealed ball bearings, self-lubricating. Operates on either A.C. or D.C. Write for full description. Sold by leading distributors. Stanley Electric Tool, 492 Myrtle St., New Britain, Connecticut.

STANLEY

Reg. U.S. Pat. Off.

HARDWARE · HAND TOOLS · ELECTRIC TOOLS

(Continued from page 154)

At present, the savings and loan and co-operative bank business finances one-third of the country's new home construction. Total resources of these savings associations approximate \$12 billion.

Bodfish termed the executive committee action "one of the most significant of recent developments affecting the nation's housing situation," and said the newly-inaugurated program will place League members squarely behind efforts to supply lower priced housing and ease the current shortage. He revealed that top officials of the League will meet with representatives of the savings and loan business throughout the country, and map plans as to how associations in different sections may participate in the financing program as outlined by the executive committee.

It was announced that literature prepared by the League, together with publications of the trade organization, will be aimed at acquainting the country's savings and loan executives with the program and why it is in the best interest of their communities.

The program established by the League will continue until the supply of medium and lower priced housing is believed adequate.

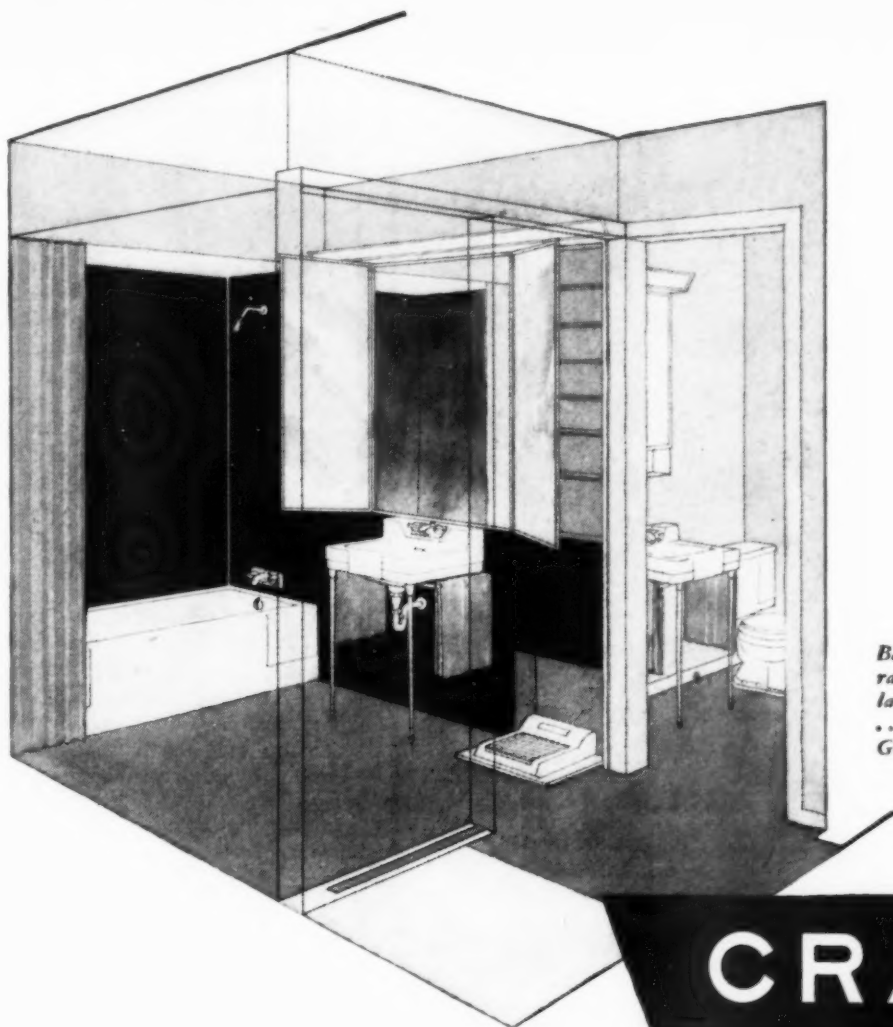
Students Compete for Best Shopping Center Design

A COMPETITION among students at architectural colleges for the design of a model "shopping center of the future," conducted by the Store Modernization Show in cooperation with the American Institute of Architects, has been announced by John W. H. Evans, managing director of the show. A committee of the AIA and retailing executives will judge the entries.

Twenty-two architectural colleges already have agreed to submit entries. There will be three prizes with cash awards of \$500, \$250 and \$125, respectively, and two honorable mentions, with awards of \$75 each. Models and drawings of winning entries will be exhibited first at the Store Modernization Show at Grand Central Palace, New York, July 6-10, and later may be sent on tour of chambers of commerce in key cities of the United States and Canada.

The problem is the unification, both in interior and exterior appearance, of a square block of retail stores into an ideal shopping center. The stores must be in an established commercial center of a city of approximately 75,000 inhabitants near each college campus.

The model "Shopping Center of
(Continued to page 158)



Bathing and toilet facilities are separated in this new Crane bathroom. Twin lavatories make each section complete ... all fixtures from the Crane Oxford Group.

CRANE

... *always* "most likely to succeed"

● It's hard to please Mr. and Mrs. Home Owner with everything you suggest. But nothing is so *likely* to succeed as Crane plumbing ... Crane is the name they themselves have chosen over all other plumbing brands.

Home owners like Crane quality, Crane styling. They like the completeness of line that gives them a style for *their* taste and a price for *their* budget.

Popularity . . . Quality . . . Completeness. All three are characteristic of the Crane line of bathroom, kitchen, and laundry fixtures. You can have Crane quality in heating, too—everything required for any system, any fuel.

Your Sweet's Builders' File carries a representative selection of Crane plumbing and heating. Some fixtures are still more available than others—check your wants with your Crane branch or wholesaler.

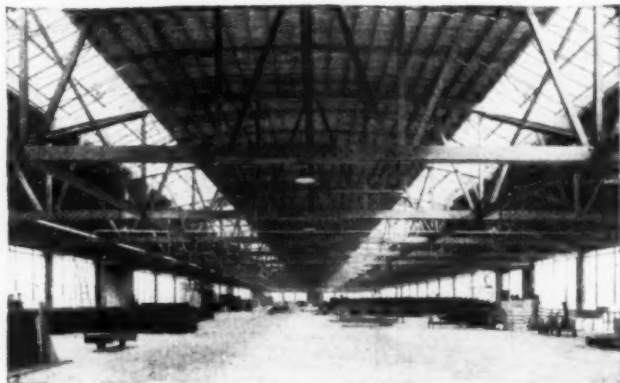
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American Roof Trusses are economical for your factory, warehouse, garage, store, or whatever you may be building. They increase floor space by eliminating center walls and posts, and they cut building costs considerably. Made by the oldest, largest exclusive manufacturer of wood trusses in America. Immediate delivery.

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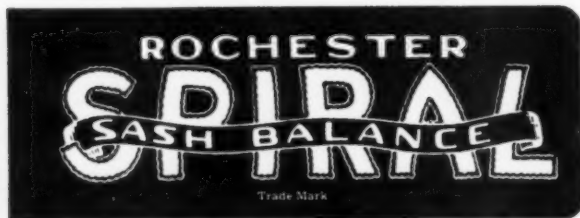
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Ask your jobber for complete information, or write direct for literature and detailed installation bulletin.



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Our 54th Year of Quality Production
802 S. 72nd STREET • MILWAUKEE 14, WISCONSIN



(Continued from page 156)

the Future" must include ten to twelve medium-sized shops, a general food store or supermarket, a department store, a news-reel theatre, a restaurant and snack bar, a nursery, a relaxation area for children and adults, and a street-level parking area.

"The creation of shopping centers on a community basis represents a great advance in city planning," Evans said. "From the standpoint of the consumer, the merchant, the owners of real property, and those charged with the even flow of traffic, shopping centers present the most economical and realistic solution to the problems of city growth. These centers present an answer to haphazard development not only from the standpoint of economics, but from the aspect of civic beauty as well.

"In setting up this architectural college competition, it is my desire not only to stimulate the thinking of architectural students in this important field," he said, "but also through them to interest civic groups in the need for this type of business community block-planning."

Vermiculite Institute Holds Annual Meeting

THE annual meeting of Vermiculite Institute, recently held at the Plaza Hotel, San Antonio, Texas, was attended by vermiculite processors from all sections of the United States and Canada. Practically every distributor in the industry was represented. Shelton W. Greer, Vermiculite Products Corp., Houston, and R. H. Rice, Mineral Products, San Antonio, acted as co-hosts.

At the business session, which opened the meeting, new officers of the Institute were elected as follows: president, L. J. Venard, Western Mineral Products Co., Minneapolis; treasurer, W. J. Bein, Zonolite Co., Chicago; executive secretary, E. R. Murphy, Vermiculite Institute headquarters, Evanston, Ill. The new board of directors are: W. J. Bein, Zonolite Co., Chicago; M. D. Muttart, Insulation Industries, Ltd., Edmonton, Alberta, Canada; R. H. Rice, Mineral Products, San Antonio; E. H. Robinson, Robinson Insulation Co., Great Falls, Mont.; L. J. Venard, Western Mineral Products Co., Minneapolis.

Two new and important committees were appointed: a planning committee of five members, with G. R. Stark, B. F. Nelson Manufacturing Co., Minneapolis, chairman; and a standardization committee, also five members, of which C. A. Pratt, West-

(Continued to page 162)

You're Ahead

4 WAYS

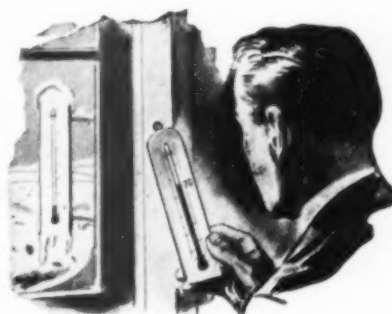
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A highly efficient barrier to heat loss, the fibrous glass wool in FIBERGLAS Building Insulation won't rot, burn, disintegrate or pack down. Continuous vapor barrier on FIBERGLAS Roll Blankets guards against condensation.



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Available in convenient forms for every building application, FIBERGLAS is light in weight, easy to handle, easy to install. Compression packages simplify handling, cut costs.



3 YOU'RE AHEAD ON SALABILITY

Home buyers, architects, builders and lending agencies recognize FIBERGLAS as "quality", a sign of good construction. This contributes to quicker, more profitable sales.



4 YOU'RE AHEAD FINANCIALLY

Good insulation enhances the value of your houses, contributes surprisingly to the comfort and efficiency of a home, and satisfied owners are your best salesmen. Assure satisfaction . . . with FIBERGLAS.

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AVAILABLE THROUGH 4 DISTRIBUTORS



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Take it from LEVITT and Sons.....

Here comes Levittown!

"Six thousand new dream homes going up in Long Island in one of the most ambitious home-building projects on record. And every one of them will be designed for better living, with G-E Appliances," says William J. Levitt, president of Levitt and Sons. Read this famous builder's comments on how electrical planning makes homes more livable—and salable!

"People want dream homes"

"It pays to build them," says William J. Levitt, president of the Company.

Let Mr. Levitt tell the whole story—"What do they mean by *dream* homes? Well, here is what we have discovered.

"A dream home is a house the buyer and his family will want to live in a long time—a house that makes

living comfortable and easygoing by taking the chores out of running a home. That goes for cottages as well as for mansions.

"And here's one more thing that's been proved in our experience—profitably!

"The best way to build a dream house is first to make sure it's designed for better living, *electrically!* Because an electric kitchen-laundry is the one big item that gives the homeowner all the advantages and modern conveniences that can make his home truly livable.

"That's the best way to make the house salable, too!

"Make all these electrical conveniences a part of the package, included in the price.

"And it will sell *faster!* Especially when you've included



G-E APPLIANCES make homes more livable—and salable!

General Electric Appliances—the ones most women want most because they've proved plenty dependable."

What About Small Builders?

Whether you're building ten houses or a hundred and more, you stand to sell quicker for more profit when you include G-E conveniences.

Home builders everywhere have discovered G-E Appliances make more satisfied homeowners. They're not only dependable, efficient, but even more—economical. General Electric Appliances bring enough savings through low maintenance and running costs to actually make up for the small additional monthly payment—usually less than \$2.50.

Facts like that make for a lot less talking and a lot more conviction when you're selling a prospect. So—

for your next project—plan *electrically* with General Electric and *profit more!*

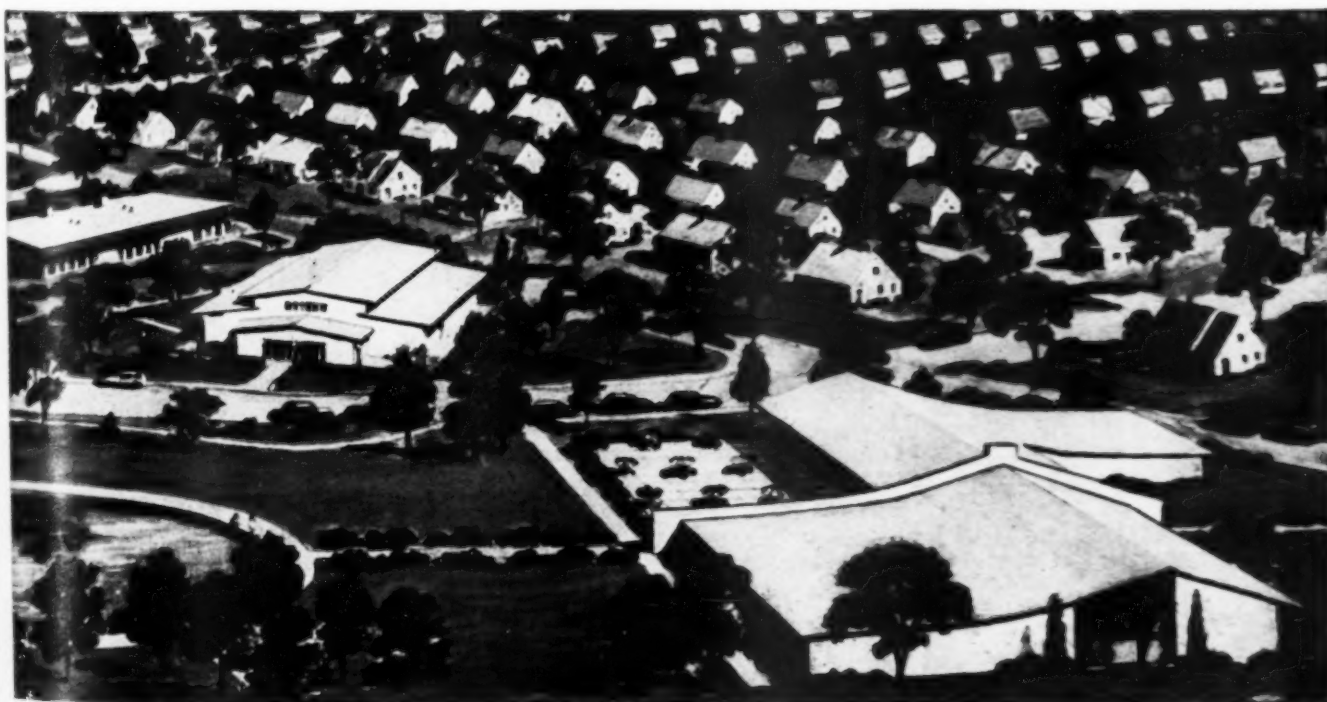
Learn the G-E Home Bureau Story

Contact your G-E distributor today. Or just drop a post card to the General Electric Company, Appliance and Merchandise Department, Bridgeport 2, Conn. Let us show you how to plan homes for better living, faster selling and bigger profits, *electrically*.

(Editor's Note): In a recent nationwide survey, 51 per cent of the men and 53 per cent of the women said General Electric makes the best electrical appliances!

The appliances most women want most

GENERAL  ELECTRIC





Build Prestige WITH **VENTO** STEEL WINDOWS

BUILDERS and home owners both appreciate VENTO quality. It's a line of steel casement windows that will bring you satisfied customers . . . and business-building prestige . . . for the years to come.



THE **BUILDER** likes to buy windows that are completely assembled, ready to install . . . that are sturdily constructed of heavy section steel to stand rigidly in position during construction, and finally operate smoothly.

THE **HOME OWNER** likes the moderate price and enduring beauty of VENTO Windows . . . less costly than wood construction, better in quality than most steel windows. Fine quality workmanship down to the smallest detail has real significance to the man making a "life-time" decision.

Other VENTO features are: heavier construction than other steel windows of comparable price; electrically welded throughout; easily installed screening or storm sash; roto hardware, and locking device.

Write for
price list
and
catalog
. . . today!



VENTO STEEL PRODUCTS

COMPANY, INC.
247 Colorado Avenue
Buffalo 15 N. Y.

(Continued from page 158)

ern Mineral Products Co., is chairman. The planning committee will plan the testing program for Vermiculite Institute, and make recommendations regarding Institute specifications. This committee will also study and make recommendations for other organizational work. The standardization committee will study processing techniques throughout the industry, with a view of improving standardization of all vermiculite products.

Mueller Furnace Company Added to "Honor Roll"

THE L. J. Mueller Furnace Co. has been added to the "Honor Roll" of business firms throughout the United States, selected by the Brand Names Foundation to receive the "Certificate of Public Service" for the 91 years its brand name, "Mueller," has "held public confidence through unflinching integrity, reliable quality and fair prices."

The award was presented to H. P. Mueller, president of the Mueller Furnace Co., at a dinner sponsored by Brand Names Foundation at Hotel Schroeder in Milwaukee.

Only brand names which have been in continuous use for 50 years or more qualified for the award, which was created by the foundation to recognize the tested value of brand names.

Russell E. Dean Named Vice President of BMEA

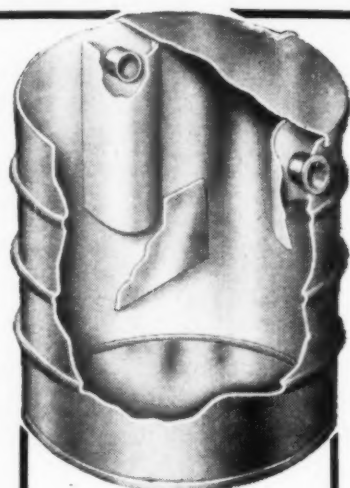
AT THE annual meeting of the Building Material Exhibitors Association in April, officers elected included David S. Miller, Armstrong Cork Co., Lancaster, Pa., as vice president. Subsequent to the meeting Mr. Miller declined because circumstances made it impossible for him to serve. Russell E. Dean, sales manager of Bennett-Ireland, Inc., Norwich, N. Y., was named vice president and will serve for 1948. The complete roster of officers was published in the May *American Builder*.

More Sizes of Thermopane Insulating Glass Added

ADDITION of six standard sizes of Thermopane insulating glass for picture windows to meet an increasing demand for large size windows has been announced by Harry Ives, Thermopane manager for Libbey-Owens-Ford Glass Co.

Standardization of sizes was instituted some months ago to speed up fabrication and delivery of these window units which consist of two panes of glass separated by a dehydrated air space, sealed in by a metal-to-glass bond.

SEPTIC TANKS



Two Sizes . . . 300 and
500 gallon capacity.
14 Gauge Steel, Black
Asphalt Coating.

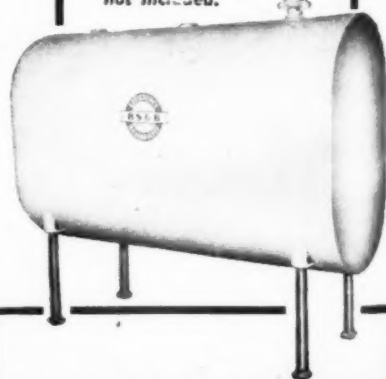
AVAILABLE FOR DELIVERY

Top quality steel tanks, fabricated by a manufacturer with over 55 years' experience. Write today for prices and complete delivery information.

BLACK, SIVALLS & BRYSON
INCORPORATED

24th Floor, Power and Light Building
KANSAS CITY 6, MISSOURI

Capacity, 275 gallons.
14 gauge black steel,
or aluminum . . . Legs
not included.



BASEMENT TANKS

WHY THIS *Galvannealed* STEEL DOOR IS AMERICA'S GREATEST GARAGE DOOR VALUE



THE PROTECTION OF GALVANNEALING, added to the strength of steel, assures lifetime durability and makes this door an unequalled value (see illustration at right). Galvannealing provides a hot galvanized zinc coat for rust protection, PLUS high temperature heat treating that effects a perfect, permanent bond between base metal and zinc coat. Assures a smooth, uniformly coated surface and a clinging base for paint, without the need for a special priming coat.

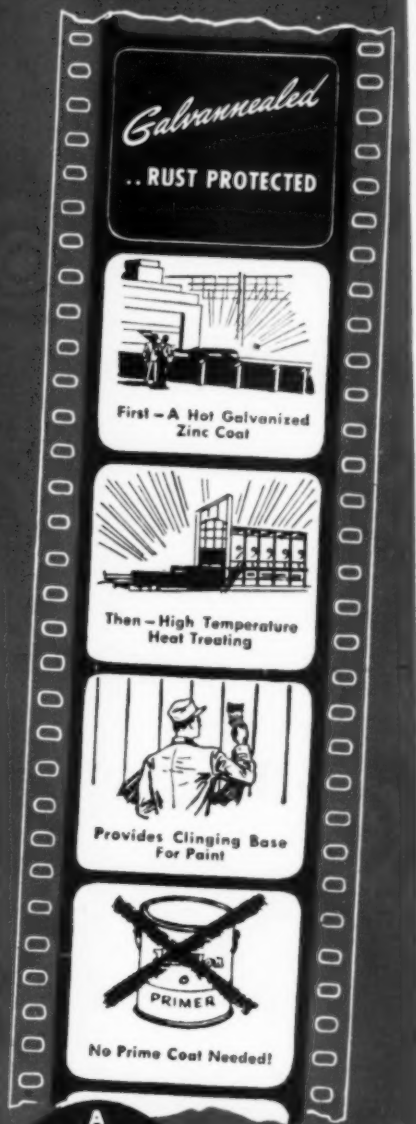
BUILT FOR STRENGTH—welded all-steel one piece door leaf, and welded all-steel frame and braces, provide outstanding strength for a lifetime. (Steel will never sag, warp, shrink, swell or rot.)

OPERATES EASILY. A child can open the Strand Door. Simple, efficient hardware is designed for trouble-free service.

INSTALLED QUICKER—an experienced man can install the Strand Canopy Door in a prepared opening in *minutes*; the Receding (track-type), too, is quickly and easily installed.

AMERICA'S GREATEST GARAGE DOOR VALUE—Give your customers the durability and performance of this galvannealed steel door—at an amazingly low price. This is the result of volume production in one plant and standardization on two models.

Strand Doors are available without waiting and without limit. Order today from your dealer, or mail the coupon, giving dealer's name.



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a subsidiary of Detroit
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ALL STEEL GALVANNEALED • OVERHEAD • ONE PIECE

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GARAGE DOORS

TWO TYPES . . . RECEDING (TRACK) AND CANOPY

STRAND BUILDING PRODUCTS COMPANY
Dept. AB6, 1710 Buhl Bldg., Detroit 26, Mich.

Please rush literature with detailed descriptions of Strand all-steel Garage Doors.

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GET THIS
Valuable
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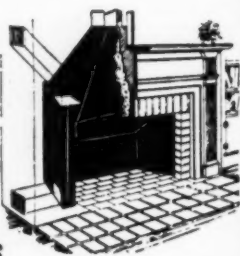
With it
You Help Owners
to Decide

on the design and materials for their fireplaces. Covers the entire field — from classical to ultramodern — in a wide variety of materials.

Any of these designs lends itself to the use of a heat-circulating fireplace — built around the

Fyro-Place

Cuts
Your
Costs
Makes
Friends



FYRO-PLACE, the improved Steel Form, saves up to 16 hours labor, plus damper, firebrick, etc. — more than offsetting its cost.

The owner gets a warm-air-circulating fireplace instead of a smoky, drafty, old-fashioned one — at no greater cost. He becomes a satisfied booster for you.

Send today for this
Valuable Book
"100 Fireplace Ideas"

PRICE FIREPLACE HEATER
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New Aluminum Roofing,
Siding, Incorporates
Beauty and Economy

NEW Kaiser Aluminum roofing and siding, made by Permanente Metals Corp., Oakland, Calif., can be applied over existing



CORNER flashing gives water tight joint

wood sheathing, wood clapboard, or stucco for rebuilding purposes. On new dwellings, it can be nailed directly to the studs, and requires no sheathing other than standard building paper. This makes the aluminum material economical to use.

Among outstanding features of the siding and roofing, are maximum strength, rigidity, and deep shadow lines achieved by concave



SAW easily cuts aluminum materials

surfaces. Produced in standard lengths of 10, 12, 14, and 16 feet, it is applied to the building from top to bottom. Each section locks with spring action to attain weather-tightness and uniform appearance.

At the lower side of each piece of siding and roofing, elongated
(Continued to page 166)



Stainless
Steel Sinkbowls

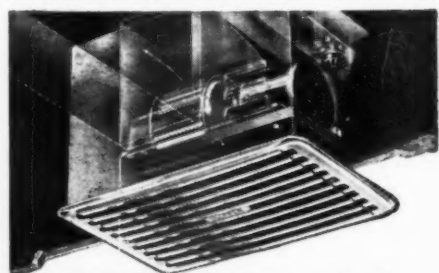
Legion sinkbowls are seamless drawn from one piece of solid or single clad stainless steel...No welds, rough edges, ridges or grooves to cause leaks, corrosion or cracks where dirt may lodge...Light in weight, yet rigid and long-wearing...Oblong, square, round or oval shapes.

Write for catalog sheet



LEGION
STAINLESS SINK CORP.

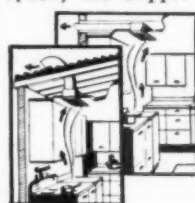
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THERE IS ONLY ONE
CLIPPER BLOWER
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This patented, proven Clipper Kitchen Ventilator mounts between ceiling joists directly above the stove, and is vented out-of-doors. The powerful squirrel cage blower (not a fan) creates a stream of fast-moving pressure-charged air which keeps kitchens free of cooking grease, heat and odors. Also for dens, bathrooms, laundries and other small rooms. Specify the Clipper and be sure of adequate ventilation. Stocked and sold by electrical dealers coast to coast.



Write us today for complete details.

The Clipper is easily installed in the ceiling and vented through a side wall or roof as shown at left.

Trade-Wind Motorfans, Inc.
5705 S. Main St., Los Angeles 37, Calif.
Send complete information on the Clipper

Name _____

Address _____



MARLITE GIVES THE BUILDER A BREAK

You'll please your customers—and make your work easier and more profitable—if you plan on Marlite plastic-finished wall and ceiling panels to create interiors of sparkling beauty and economical utility.

Your customers like Marlite for its gleaming beauty and the ease with which it can be kept sparkling clean and lustrous—its sealed surface is the reason!

And you'll like Marlite because these wall-size panels go up quickly and easily over new walls or old, provide an opportunity to increase your business and profits on new construction and modernization. And, because Marlite is adaptable to every type of building, domestic and commercial, where sanitary, colorful walls and ceilings are needed, you'll find Marlite opens up countless new business opportunities for you.



EASY TO INSTALL—you can do the entire job with regular carpenter's tools.

SUITABLE FOR COMMERCIAL OR DOMESTIC BUILDINGS—wherever beautiful, serviceable interiors are required.

EQUALLY EFFECTIVE IN NEW CONSTRUCTION OR MODERNIZATION.

ADAPTABLE TO MANY USES—Walls, ceilings, counters, bars, etc.

SOLD BY LEADING DEALERS EVERYWHERE.

PART OF A COMPLETE LINE OF WALL PRODUCTS.

PUT THESE OTHER MARSH PRODUCTS TO WORK FOR YOU

- MARSH MOULDINGS
- MARSH ADHESIVES
- MARSH BATHROOM ACCESSORIES
- MARLITE POLISH
- MARSH CAULKING



*for
Creating
Beautiful
Interiors*



Complete
Information
Will Be Found
In SWEET'S FILE
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KITCHENS



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SERVICE STATIONS



INSTITUTIONS



STORES



HOSPITALS



HOTELS



RESTAURANTS



THEATRES

OLSON GARAGE DOOR

Kit

LOW COST... EASY TO HANG...

HERE'S WHAT YOU GET...

- **FEATHERWEIGHT ALUMINUM FRAME**—all webbed—with heavy gusset plates
- **SILENT, JAMB-TYPE HARDWARE**—constantly balanced—easy to install and adjust
- **KIT COMPLETE**—simply apply facing and hang.

FINISH QUICKLY WITH MATERIALS ON HAND!

Rugged, extruded, aluminum frame strip-punched for quick, easy facing with plywood, presd-wood etc. Panels screw into place. With $\frac{1}{2}$ " plywood weighs approximately 95 lbs. Can be finished attractively in wide variety of styles.

Aluminum frame provides required strength . . . holds weight to minimum.

Easy to install . . . easy to operate

Floating balance . . . adjustable . . . stop door at any point.

No rust—no sag—no warp . . . unaffected by weather conditions

READY BUILT: THE OLSON
ALL-ALUMINUM GARAGE DOOR

Sturdy, one-unit, fool-proof overhead garage door . . . one man installs in little over an hour. Fits standard opening—50 lb.—ready to hang. Complete with Floating-Balance, Finger-tip control hardware.

MODERN—FUNCTIONAL
AT LOW COST

WRITE TODAY

for prices and further details! Some distributor territories still open.

Olson Bros.

MANUFACTURING CO. • OMAHA 5, NEBRASKA

(Continued from page 164)
holes are pre-punched for nailing. This was done to save time in construction and to allow for contraction and expansion.

Both the siding and the roofing can be erected by carpenters with regular wood tools. Though the materials are erected by the use of nails, the nails will not show because they are covered by the joints.

The sections easily take finishing coats of paint. All of the siding

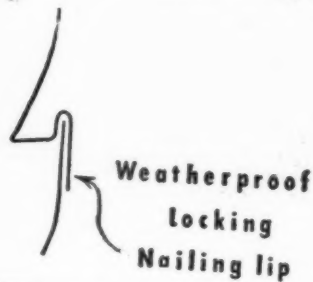


BUTT JOINTS held with back-up plates

material is given a zinc chromate prime coat before shipment from the mill, and any house paint can be used on the metal finish.

The tension-seal roofing, which also incorporates the curved surface, is supplied unpainted to take advantage of the heat reflectivity of aluminum. The roofing is laid on in long horizontal strips.

Permanente's announcement of their new products culminates a two-year search by that company's engineers for a practical type alu-



Weatherproof
locking
Nailing lip

JOINTS are locked by spring-tension

minum roofing and siding. Permanente's Trentwood mill at Spokane, Wash., has been equipped with special roll-forming machinery to produce the new siding and roofing, and plant shipments started on a national scale last month.

The material is shipped in boxes, each containing 200 base square feet, weighing approximately 106 pounds.

Kaiser Aluminum's new line also includes window flashings, door openings, and corner trims.

BETTER BRICKWORK

is EASIER with BRIXMENT!

Full mortar joints are one of the best possible precautions against leaky brick walls. When cross joints and head joints are not *completely* filled with mortar, in both face brick and back-up work, water may penetrate to the inside of the wall, through openings in the joints.

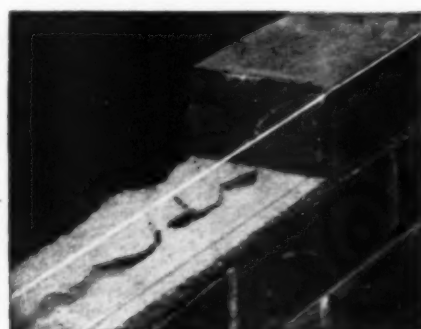
HEAD JOINTS



Slushing does not properly fill the voids in the head joints.



When mortar is spotted on only one corner of the brick, slushing seldom fills the voids.

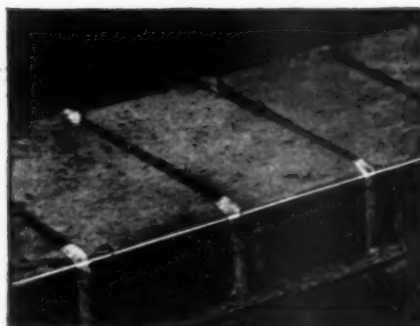


Even when mortar is spotted on both corners of the brick, slushing will not always fill the voids.

CROSS JOINTS



When mortar is spotted on both corners of the header brick,



there is nowhere near enough mortar in the joint.



Slushing will not fill the voids.

Poor workmanship like that shown above is the result of (1) excessive speed in laying the brick or (2) the fact that the mortar is so poor and lean as to make better workmanship too difficult.

Brixment makes this kind of workmanship unnecessary. It is rich, plastic, and has

high water-retaining capacity. It works almost as easy as straight lime putty. In addition, it has better bonding quality and greater resistance to freezing and thawing.

It is this combination of advantages that makes Brixment the leading masonry cement on the market.

LOUISVILLE CEMENT COMPANY, Incorporated, LOUISVILLE, KENTUCKY

**COST SAVING
Automatic
Gas Fired Heater**



HEAT IN
WINTER

CIRCULATES AIR
IN SUMMER

The ideal unit for single
or multiple installation.

SPECIFY THE MODERN, TROUBLE-FREE UNIT HEATER

Year around utility, plus complete and *auto-*
matic control of heating, feature Reznor gas
fired unit heater installations. Specific areas
can be comfort-regulated to requirements . . .
no need to heat all of partially used buildings
to bring heat to sections in use . . . just cut in
Reznor units as needed.

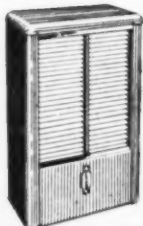
EASY INSTALLATION

Installation is easy and fast. Install the heat-
ers—pipe the gas—connect the electric serv-
ice, and the best obtainable *automatic* heating
system is ready for service.

Reznor heaters are designed to be used with
natural, manufactured, and liquid petroleum
gases. Write today.

**REZNOR SPECIAL HEAT EXCHANGER AND BIG,
QUIET FAN DELIVER MORE HEAT FROM FUEL**

REZNOR
Gas fired unit heaters



**SUSPENDED OR
FLOOR MODEL**

A SIZE FOR
EVERY NEED

REZNOR CO.
MERCER 17, PENNA.
Gas Heaters Since 1888

**NO BOILERS · NO STEAM LINES
NO FUEL STORAGE · NO FIRE TENDING**

Kitchen Cabinet Institute Elects New President

HARVEY G. KNUTH, manager of
the kitchen cabinet division of
Lyon Metal Products, Aurora, Ill.,
has been elected president of the Steel
Kitchen Institute. Knuth was elected
at the two-day meeting held recently
at the Congress hotel in Chicago.
Previous to his election as president,
Knuth served as chairman of the



HARVEY G. KNUTH

standardization committee in 1940,
1941 and 1947. He was also a mem-
ber of the board of directors.

The Steel Kitchen Cabinet Insti-
tute is a national group of manufac-
turers organized to maintain a high
quality standard in steel kitchen cabi-
nets. The approved seal of the or-
ganization may be carried on only
those cabinets that have passed rigid
tests specified by the Institute. Na-
tional headquarters are in Cleveland,
Ohio.

AIA, AGC, Will Jointly Study Building Problems

THE American Institute of Archi-
tects and The Associated Gen-
eral Contractors of America have
established a joint committee
which will consider problems in
building construction of mutual
concern to architects, contractors,
and the public.

The committee will be known as
the National Joint Cooperative
Committee of the AIA and the
AGC.

For a number of years the two
associations have worked construc-
tively together on such matters as
standard contract provisions, sim-
plified specifications, and recom-
mended bidding practices. Recently,
the architects and the contractors
jointly developed and published "A
Suggested Guide to Bidding Pro-
cedure" which, in the interest of
the public, established standards
for obtaining bids that eliminate
waste and misunderstanding that
might lead to unexpected costs for
the owner.

HOW TO GET A *Smooth* HAND FINISH WITHOUT *Costly* HAND LABOR

- ✓ CABINETS
- ✓ DOORS
- ✓ MANTELS
- ✓ TREADS
- ✓ TRIM



EASY cuts no swirls or other abrasive
marks. Straight-line action produces "hand
sanding" results on white wood, filler and
final coats in 1/3 the time. For CURVED
or flat, WET or dry work. EASY is not a
disc, belt or orbital sander.

Write for literature.

DETROIT SURFACING MACHINE CO.
7458 West Davison Detroit 4, Michigan

1000's ARE SAVING WITH IT
— Write for Facts! —

RECIPROCATING
ELECTRIC SANDER

EASY

NEW!
Economy

VIKRE

SASH HOLDER

For Windows Everywhere

Worried over high construction costs? Save
dollars per opening and time on the job with
Vikre New Economy Sash Holders.

No weights—no cords—no mortising. Just
drill one hole, that's all. No drafty weight
pockets to give you insulation headaches.

For oversize windows, or where prolonged
hard usage is expected, Vikre Heavy Duty
Sash Holders do the job. Easy to install.
Once adjusted, they require no more atten-
tion. Use them wherever there are windows
and for windows everywhere.

Tested and proved for years on thousands
of construction jobs, Vikre Sash Holders are
available through your building supply
dealer. For full details write:

J. N. VIKRE CO.

3016 14th Ave. S. • Minneapolis, Minn.

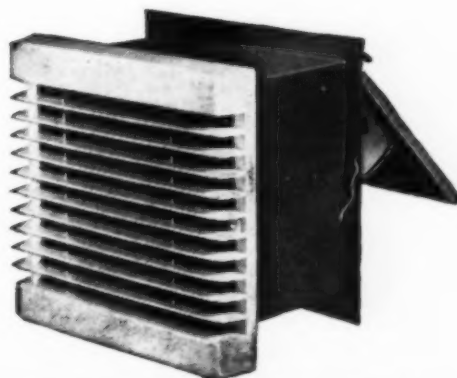
SEE

Aeropel
gives it
women



*Build your reputation well—
Be smart! Install Aeropel!*

NEW LOW-COST KITCHEN FAN



SEE the difference!

Aeropel adds beauty to a kitchen . . . gives it that new modern look which makes women want to buy the houses you build.

HEAR the difference!

Whisper-quiet operation of Aeropel wins approval of women and men, too. Makes them say, "There's a thoughtful builder."

FEEL the difference!

Aeropel really whisks disagreeable kitchen odors out fast . . . keeps kitchens fresh as a daisy . . . helps close sales for new houses.

Yes, you can see, hear and feel the difference between Aeropel and ordinary kitchen ventilating fans.

That's why more and more smart builders, men who want quick sales for their houses, are installing Aeropel.

Put a feather in your cap with prospects, build lasting good will with buyers (and add to your profits) by featuring Aeropel in your new houses.

National magazine advertising, newspaper, radio and television programs are building a big acceptance for Aeropel.

PRODUCT OF
AMERICAN BLOWER

Cash in NOW. Ask your supply house. If they cannot fill your needs, call our nearest Branch Office or mail coupon.

AMERICAN BLOWER CORPORATION, DETROIT 32, MICH.
CANADIAN SIROCCO COMPANY, LTD., WINDSOR, ONT.

Division of **AMERICAN RADIATOR & Standard Sanitary Corporation**



AMERICAN BLOWER CORPORATION
Detroit 32, Michigan

Gentlemen:

Please send me free booklet, 10 Ways to Install Aeropel.

Name _____

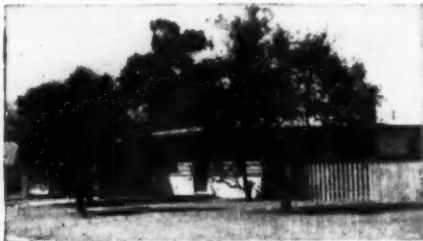
Address _____

City and State _____

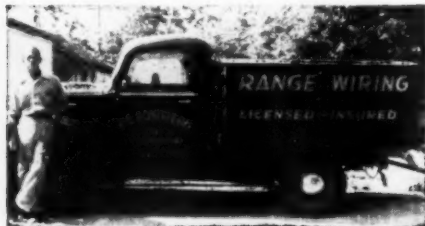
TOUCH-PLATE

*America's Finest
Light Control
System*

IN NEW
RESIDENTIAL DEVELOPMENT



Parker Construction Company's 32-unit housing development at Pomona, California, features the Touch-Plate System of low voltage remote control lighting.



Vic Bongberg, electrical contractor for the Parker Pomona development, installed Touch-Plates throughout the 5-room homes for added beauty, safety and convenience.



*Just TOUCH
your lights on!*

**MORE SWITCHES
BETTER SWITCHES**

AGENTS

Harry Q. Beven—Milwaukee. A. Lee Clifford & Co.—Indianapolis. R. H. Cupples—Minneapolis. Glidden Engr. & Equip. Co.—Houston, Dallas, San Antonio. R. A. Hanke & Co.—Chicago. H. M. Hemphill & Co.—Detroit. E. M. Paullin Equip. Co.—Buffalo. J. O. Schmitz Co.—Kansas City, St. Louis. Wagner-Green Co.—Cleveland. A. D. Stein, Inc.—New England States. Wm. B. Bleiman & Son—Philadelphia. Fred G. Kraut & Son—New York City. Pacific Electro Sales—Los Angeles, San Francisco, Portland, Seattle, Salt Lake City.

Approved by
Underwriters' Laboratories



**THE RELAY DOES
THE WORK!**

Rheem Company Names New Manager of Stoker Sales

RHEEM Manufacturing Company has appointed T. O. Lawler, veteran coal heating man, manager of stoker sales, according to an announcement made by C. T. Miller, assistant general sales manager. The company manufactures both



T. O. LAWLER

industrial and domestic stokers and stoker-fired furnaces.

Lawler for nearly ten years was with Fairbanks-Morse for whom he pioneered an anthracite burner. He studied engineering at Rennselaer Polytechnic Institute and for many years was associated with various railroads and the D. L. & W. Coal Co., promoting the use of both anthracite and bituminous coal. Most recently he was with A. O. Smith. He will make his headquarters in the company's Chicago office.

Industry Facts Find Ready Acceptance

THE drive to get construction facts-of-life across to the general public has been put into high gear, and results of the newly-announced industry campaign are beginning to appear. Initial distribution of pamphlets, speeches, press releases, and other material has been started, and the sponsors—the Construction Industry Information Committee—report encouraging reception by the industry.

Under the direction of Chairman Melvin H. Baker, president of the National Gypsum Co., the committee emphasized the industry's current record-smashing housing volume in the first economic study it released, entitled, "Who Can Afford Our New Housing?"

The second study will tell the story of the tremendous come-back in construction of all types, and the rapid increase in production of

(Continued to page 172)

Art in Iron

NEW stock designs — lower prices!



Artcraft stock rails No. 395 in 4 lengths. Priced per pair.	
2'6"	\$12.00
3'6"	\$14.00
3'0"	13.00
4'0"	15.00
STOCK PORCH COLUMNS	
Corner & Single-panel	
Height corners 12" panels	
7' 0"	\$25.00 ea.
7' 6"	27.00 ea.
8' 0"	29.00 ea.
IMMEDIATE DELIVERY on all Artcraft stock items.	
Prices net F.O.B. Columbus, Ohio. Terms: Payment with order or C.O.D. Have ARTCRAFT do your most exacting custom iron work too. ORDER DIRECT! SATISFACTION GUARANTEED!	
Ohioans add 3% Sales Tax	

No. 20

No. 14

Write for our new 36 page catalogue
ARTCRAFT Ornamental Iron Co.
724 E. Hudson St. Columbus 11, Ohio

Here's the newest Time-Saver to hit the Building Market. Pays for itself on-the-job taping Sheetrock in one average 5-room house.

Tapemaster



list price
\$2.95

Patent
Applied For

- High grade Steel holder with adjustable belt • Size—2 1/2" x 2 1/2" x 12" • Light in weight • Handy to carry • Keeps both hands free at all times • Write for free descriptive folder today.

Dealer
inquiries
answered
promptly

**DuBrack
Mfg. Co.**

P.O. Box 805
Fort Worth, T. Kas

Beauty on a Budget

WITH CURTIS WOODWORK



Here is a splendid example of the type of doorway often seen on Pennsylvania Colonial homes. It is suitable for houses of any structural material. Design C-1733.



With its interesting lattice, this Curtis entrance is especially suited to the small home. Note the sheltering protective hood. Design C-1767.



Built-in furniture of good design adds permanent charm and value to any house. This simple, yet charming, Curtis cabinet—design C-6526—is made for corner use also.



"Utility made beautiful" is a fitting description for this Curtis cabinet for books, chinaware or collections. Easily installed in old or new homes. Design C-6503.

● Good taste—enduring beauty—need not bear a high price tag, when you choose Curtis Woodwork for the houses you plan and build. Curtis Woodwork provides distinction and livability even when the building budget is strictly limited—and Curtis standards of quality assure lasting value for the owner. Examples on this page—chosen from among the wide range of Curtis designs—will prove the case.

When in New York, visit the Curtis Woodwork Display at Architects' Samples Corporation, 101 Park Ave.

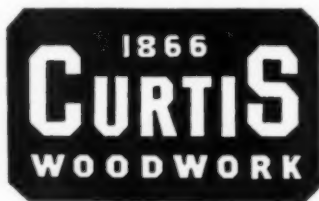


A late eighteenth century mantel—adapted from one in the old Lee House at Marblehead, Mass. Note the unusual shape of the fascia board. Fits any traditional style architecture. Design C-6063.



There's a "homey" air about this well-proportioned mantel—a new design by Curtis. Nearly all Curtis mantels are supplied with adjustable architrave—an aid in planning. Design C-6040.

Mail Coupon for Complete Information



CURTIS COMPANIES SERVICE BUREAU
AB-6W Curtis Building, Clinton, Iowa

Gentlemen:

Please send me your book on Curtis Stock Architectural Woodwork.

Name _____

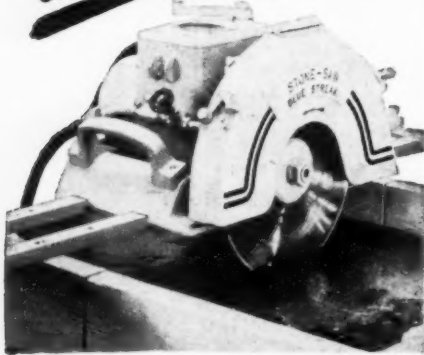
Address _____

City _____

State _____

I am ☐ Architect, ☐ Contractor, ☐ Prospective Home Builder, ☐ Student.
Please check above.

On the job



**Cut Your Building
Materials with the...**

**STONE
Blue Streak**

**MOST POWERFUL PORTABLE
ELECTRIC GUIDED SAW**

**CUT WET or DRY
using Diamond or
Abrasive Wheels**

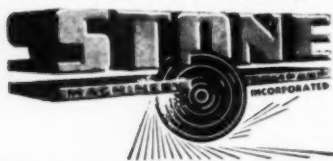
✓ **Check These Times
for Cutting**

- 8 inch Building Brick — 12 to 18 seconds per cut
- 1 inch Marble — 3 feet per minute
- Granite — 3 to 4 seconds per square inch
- 3 inch Hard Concrete flooring — 1 foot per minute
- 4 inch Steel Channel — 30 seconds per cut
- 3 inch I Beam — 40 seconds per cut
- 3 inch Cast Iron Pipe — 20 seconds per cut
- Also cuts concrete blocks, tile, terrazzo, marble, slate, asbestos products, refractories, 7 to 10 times faster.

WEIGHING ONLY 78 LBS., The Stone Blue Streak is rated 2½ H.P.—110 universal or 220-single phase. Will cut 5-inch depth of cut and up to 10 feet in length using a 14-inch wheel.

*Write us today
for further information*

STONE MACHINERY CO., INC.
Dept. A6 Box 1363 Syracuse, N.Y.



HIGH SPEED CUTTING MACHINERY

(Continued from page 170)

building materials from war-restricted output figures.

In this connection, the committee reveals that materials producers expect in 1948 to exceed the record-breaking production of 1947 if current demand is maintained. Production of building materials during 1948 in practically all categories promises to be sufficient, or more than sufficient, to meet anticipated demand, the committee states.

In addition to giving facts to the general public, through the press and otherwise, the committee is preparing pamphlets and speeches, based on its economic studies, which will be distributed throughout the building industry with the aid of industry trade associations. A separate pamphlet is written for each participating industry branch, so that everyone in the building business from top to bottom will know the story of his industry's accomplishment and can help spread the story to the public.

N. Y. Plumbers Accept Wage Stabilization, Use of Power Tools on All Jobs

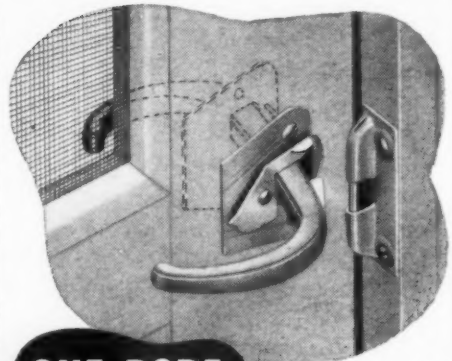
WAGE stabilization for plumbers and complete mechanization of the plumbing industry in New York City has been announced. The agreement is expected to increase man-hour productivity, reduce costs and create wider employment by encouraging a higher level of building.

The agreement freezing wages, hours and working conditions from May 1, 1948, to June 30, 1950, was announced jointly by Eugene Duklauer, president of the Association of Contracting Plumbers of New York City, and William T. Dodd, president of Local No. 2, United Association of Plumbers. The stabilization agreement, covering 4,500 journeymen plumbers in Manhattan and the Bronx, also has been accepted by the Metropolitan Master Plumbers, Inc. of the Bronx and will cover approximately 400 independent plumbing contractors. Brooklyn and Queens union plumbers have a separate agreement with contractors which runs until April, 1950.

HHFA Law Division Makes Chart On Housing Finance

A 10-PAGE chart, giving a comparative outline of the principal provisions of state statutes authorizing direct or equity investment in

(Continued on page 174)



**ONE-BORE
LATCH**

Automatic
**PUSH or PULL
ACTION**

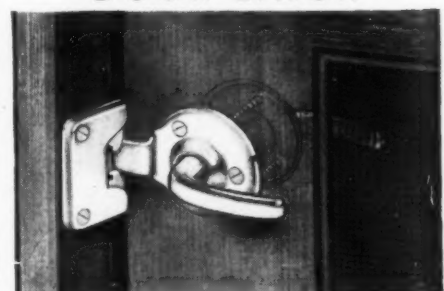
Push the handle if the door swings away from you; pull it if the door swings toward you. That's the simple principle of the Ideal Latch for screen and storm doors, as well as many other applications. New '48 model includes latching action in the strike... silent operating... easier latching... stronger handle. Trouble-free—absolutely guaranteed against breakage regardless of cause. Requires no mortising—just bore one hole and insert 6 screws. Available with or without locking lever. Handles furnished in cast, brass, bronze and aluminum. Also latch with stamped steel handle manufactured as previously. Ask your jobber, or write for literature.



**Display Models
For Dealers
Ask Your Jobber**

250 EAST FIFTH STREET
ST. PAUL 1, MINNESOTA

IVES
Non-Mortise
DOOR LATCH



The IVES Non-Mortise Latch is as easy to install as a rim latch—as neat as a mortise lock. It is made in brass or steel and is now available for prompt delivery. It is unsurpassed for easy latching and features attractive cast handles... longer spindle which adjusts automatically for ¾" to 1¼" doors and can be adjusted to 1¼"... improved strike allows for sagging of door.

See your Jobber

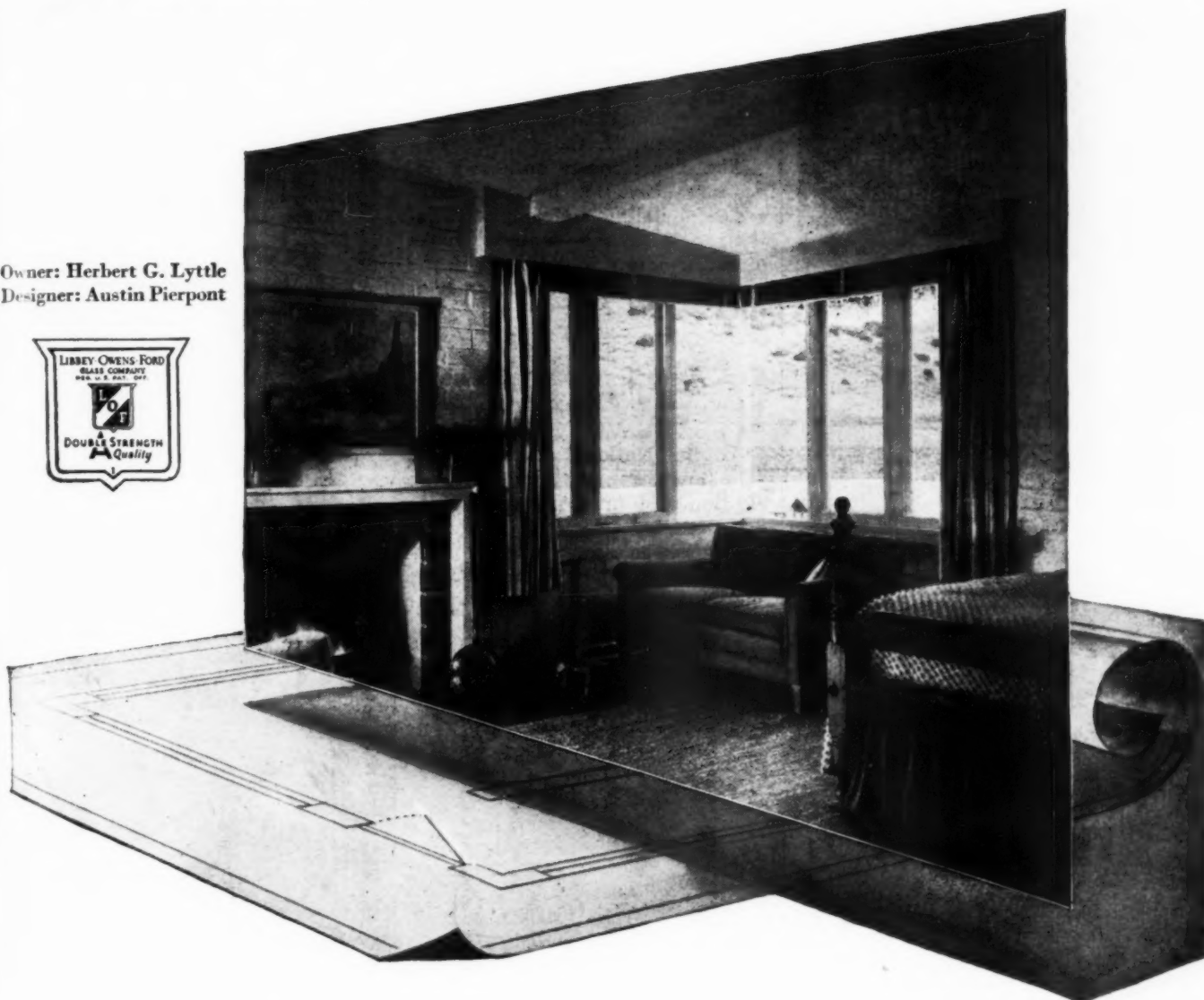
THE H. B. IVES CO.

NEW HAVEN, CONN.

Quality Hardware

SINCE 1876

Owner: Herbert G. Lytle
Designer: Austin Pierpont



You're Selling Sunshine!

Sunshine is never out of style! And when you include plenty of window space in your houses as a built-in sunshine feature, you score an important point with prospective buyers. Glass does a lot more to enhance a home. Wide glass areas give even small rooms an expansive look... let occupants enjoy the ever changing panorama of the seasons.

You gain an additional selling advantage when the window glass you use bears the L-O-F label. It assures buyers that you have used better, clearer glass... and marks you as one who handles only top quality materials. Libbey-Owens-Ford Glass Company, 6168 Nicholas Building, Toledo 3, Ohio.

LOF also makes polished plate glass, safety glass, colorful Vitrolite* glass facing, Tut-flex* tempered plate glass and other flat glasses. Only Libbey-Owens-Ford makes Thermopane*—the first mass-produced insulating windowpane.

*®



LIBBEY • OWENS • FORD

a Great Name in **GLASS**

This cutaway view shows
why the **IMPROVED**
ACME TWIN
is the most efficient sash
balance ever designed



See your dealer or write for literature

ACME
SASH BALANCE COMPANY
1626 Long Beach Ave.
Los Angeles 21, Calif.

(Continued from page 172)

housing by various types of financial institutions has been prepared by the Division of Law of the Housing and Home Agency in Washington, D. C.

The digest covers authority under state laws for insurance companies, building and loan associations, and savings banks to make direct or equity investments in the ownership and operation, or construction and sale, of housing accommodations.

National Radiator Elects New Sales Vice President

ROBERT S. WATERS, president of the National Radiator Co., Johnstown, Pa., has announced the election of John C. Barnes as vice president for sales.

Barnes was a former sales manager of the company's Washington and Philadelphia branch offices, re-



JOHN C. BARNES

spectively, and has been associated with the firm since 1940.

Prior to becoming affiliated with the National Radiator Co., Barnes was associated with Montgomery Ward and Company, Inc., in the engineering department and later as assistant sales manager of their Baltimore branch.

F. W. Ramsey to Head Foreign Liquidation Group

FRED W. RAMSEY, a member of the board of directors and past president of Perfection Stove Co., has been named to head the Foreign Liquidation Commission of the United States State Department. With his wife, Ramsey is now in Paris. Later, he will journey to Frankfurt and Berlin.

Ramsey started with Perfection Stove Co. as a stock boy when he was 15 years old. Twenty-three years later, he was elected to the presidency of the company. He retired after four years in office to devote his time to philanthropic and welfare activities.

LUMI-SHADE

It's A New Name...It's A New Product
with **BIG PROFITS** For You!

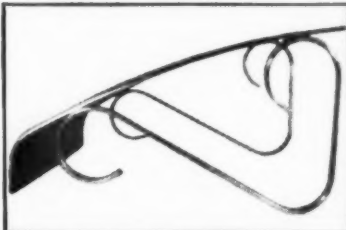
LUMI-SHADE is designed for houses, apartments, store fronts, office buildings and factories.



The simplicity and beauty of its streamline design makes

LUMI-SHADE

A SELL ON SIGHT PRODUCT



LUMI-SHADE is constructed of sturdy aluminum. Rigidly tested for stress and strain, gives outstanding protection against any kind of weather and is a permanent part of the building. **LUMI-SHADE** comes unpainted or in baked enamel, green, blue, and dubonnet. Baked in infra red ovens, for durable surface and real beauty.

LUMI-SHADE comes in stock sizes.

Model No. 10	Model No. 20	Model No. 30
30" Wide 30" Projection	36" Wide 30" Projection	42" Wide 30" Projection
Model No. 40	Model No. 50	
42" Wide 39" Projection	53" Wide 39" Projection	

PATENT PENDING

MAIL THIS COUPON TODAY

THABET MANUFACTURING CO.
626-628 Huron St., Toledo 4, Ohio
PLEASE SEND ME FOLDER

Name _____

Address _____

THABET
MANUFACTURING CO.
(Designers and Makers
of *Lumi-Shade*)
626-628 HURON STREET
TOLEDO 4, OHIO

***NOW!* EVERY LOW-COST HOUSE CAN HAVE REAL COPPER FLASHING!**



REVERE HOME FLASHING SYSTEM } LOW IN COST! HIGH IN QUALITY!

WITH the low-cost, easy-to-apply Revere Home Flashing System you can provide lasting protection at all the vital joints of even the most moderately priced houses. This new system is based on a special gauge, special temper and special size of sheet copper intended exclusively for flashing low-cost houses. In addition, Revere has developed simple and economical methods of application.

This Revere Home Flashing System is packaged, complete, and ready to use. Each package contains: (1) 10 sheets of special-temper sheet copper pre-cut to 18" x 48", the right size for easy handling and economical installation; (2) a 16-page instruction book that clearly shows—in words and pictures—the best way to install flashing around doors, windows, chimneys, and adjacent wall and roof joints; (3) 200 hardware bronze nails—enough to do the job right.

Two thrifty packages of Revere Home Flashing are enough to seal *all* the vital joints on the average small house.

With the Revere Home Flashing System, builders are now able to give low-cost homes all the advantages of durable, non-rusting copper. It adds an important sales point to the house; it enhances the reputation of the builder as a user of quality material; it assures complete, satisfaction for the owner.

AT YOUR BUILDING SUPPLY DEALER

Your building supply dealer has Revere Home Flashing in stock . . . or can get it for you promptly. Why not ask him today—and start now to give your customers the protective advantages of the Revere Home Flashing System.

OF COURSE GOOD CONSTRUCTION CALLS FOR COPPER DOWNSPOUTS AND GUTTERS, TOO!



REVERE

COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

230 Park Avenue, New York 17, New York

Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.; New Bedford, Mass.; Rome, N. Y. — Sales Offices in Principal Cities, Distributors Everywhere.

Save Money

Buy

SCOTT-NEWCOMB

Products Direct

Increase Sales Appeal
of Your Homes

Smart, Quiet,
Efficient
Window and
Attic Fans



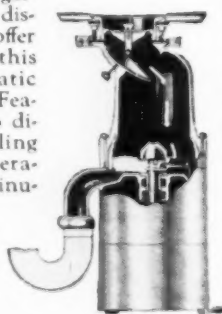
The "S-N" window fan, shown above, is unique in design and appealing to anyone who wants quiet, efficient air circulation. Either pulls in fresh air or exhausts stale air. Three-speed motor provides flexibility — simple to install — compact design — light in weight.

They are high in quality — reasonable in cost.

Scott-Newcomb also offers a complete line of highly efficient "CirCOOLator" ventilating and attic fans for home, office and factory.

S-N Garbage Grinders

Cash in on the growing acceptance of garbage grinders and disposers. You can offer your customers this modern, automatic garbage disposer. Features include two directional shredding and grinding operation—safe, continuous feed—self-cleansing, odorless operation—simple installation—low operating cost.



Other S-N Products for the Home Builder:

- Air Conditioners, 3 and 5 ton
- Oil Burners
- Furnace Blowers
- Furnaces, hot air, water, steam
- Stokers
- Water Heaters
- Water Softeners

Write today for complete
information

SN-59



SCOTT-NEWCOMB, Inc.

1442 South Boyle Avenue
St. Louis 10, Missouri

Tool Improves Layout Of Modular Products

CHARLES MEDDINGS, who has been laying brick for 55 years, laying out a story pole with a modultape, developed by modulingineer Fred Heath, McLean, Va.,



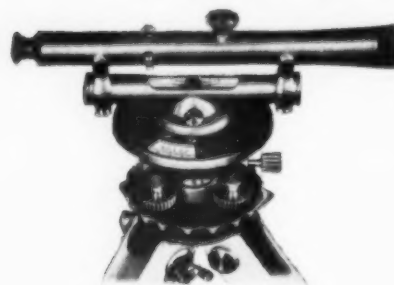
as a tool to assist masons and carpenters in the correct layout of modular products.

To assure dimensional stability, the new tape is made of a coated fabric woven of Fiberglas yarns. Tapes are available in 4, 8 and 12-foot lengths. For shorter modular divisions, the tapes have eyelets from which modular products can be spaced directly, or a pencil can be inserted to transfer the spacings to a story pole or layout strip. Three types of tape are available, for 4, 2-2/3 and 3-1/6-inch layouts, respectively.

Handbook of Engineering Information Is Published

BASIC scientific and engineering information about wood and wood-base materials used in housing, particularly through factory fabrication, has been assembled in a 330-page handbook, "Manual on Wood Construction for Prefabricated Houses," published by the Housing and Home Finance Agency and the Office of the Housing Expediter.

Though assembled primarily for use by prefabricators, much of the information can be applied in all types of housing, whether factory or site fabricated. The general information about properties of wood, plywood, and kindred materials is applicable in any type of construction where reasonably comparable conditions of use are in existence.



BUILDER'S LEVEL

(DUMPY TYPE)

- Needs No Servicing
- Sealed Against Dust
- Ideal for On-the-Job Work
- Longer Lasting Accuracy

Manufactured to the same exact standards as all Brunson Instruments. Write for detailed information and name of nearest distributor.

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**Every Painter!
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OIL FURNACE...



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The best known name in oil heating since 1910

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Creates NEW DEMAND featuring KRESKY'S year-round Oil Heating Line

TODAY, through the greatest national advertising campaign in Kresky history, more millions of heating equipment customers are learning that there's a Kresky unit for every heating need and every budget. Through magazines such as the "Saturday Evening Post" and "Small Homes Guide" Kresky is reaching a huge market of home builders, modernizers and other heating prospects. Reaching them and selling them on every Kresky product. Month after month, Kresky advertising of the year-round Kresky line is building year-round sales and profits for Kresky dealers.

Sell the Year-Round KRESKY Line

No need to worry about a slack season when you carry Kresky oil heating equipment. Winter, summer, spring or fall, there's always an active market for Kresky products. Kresky manufactures floor furnaces, dual wall furnaces, water heaters, basement furnaces, commercial heaters, and conversion burners for all types of ranges, home or industrial. For complete information, write for our 1948 illustrated folder

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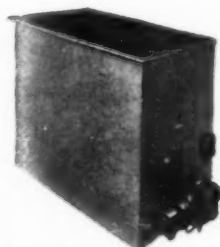
KRESKY MFG. CO., INC.
PETALUMA,
CALIFORNIA



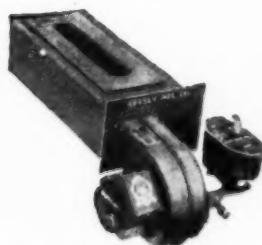
The Best Known Name in Oil Heating Equipment Since 1910



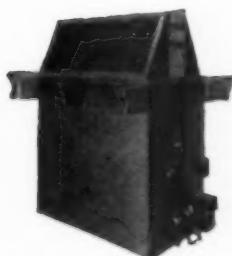
Storage
and Auxiliary
Water Heaters



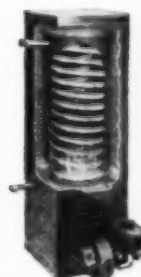
Floor Register
Model



Conversion
Oil Burner



Dual Register
Model



Auxiliary
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Master
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BE INDEPENDENT OF THE MILL!



Save **BIG** money and
unnecessary trips to
the mill by owning a

BOICE-CRANE NO. 2120 SPINDLE SHAPER

You can turn out commercial grade sash, fine mouldings, coped joints, stair treads, drawer and cupboard fronts and do other millwork yourself.

Boice-Crane offers a complete line of cutters for this large capacity shaper for producing most commercially used shapes. You can run wide mouldings and raised panels in one cut with our Ogee Sash Cutter sets. The Boice-Crane is the only shaper having "down-draught" exhaust for chips from the cutters, and $\frac{1}{2}$ " and $\frac{3}{4}$ " cutter-arbors formed on a solid one-piece vanadium-steel spindle—stronger, more accurate and safer than any 2-piece type. Merely invert the quill to change from $\frac{3}{4}$ " to $\frac{1}{2}$ " arbor without special tools.

Large 1" diameter precision ground spindle, carried on two high quality dust and grease sealed ball bearings, stays true even after years of running wide, deep cuts. The bearing-seats in the quill casting, as well as the entire body of quill are all finely ground to precision dimensions.

The 20" x 27 $\frac{1}{2}$ " table features a large opening with provision for nested table rings, with these advantages: (1) All cutters, up to 6 $\frac{1}{4}$ " diameter lower below table to undercut for greater safety. (2) Undercutting lessens danger of springing spindle. (3) Undercutting brings cutters closer to spindle bearings to reduce strain and wear.

SPECIFICATIONS:

Table (has 1 miter-gauge groove): 20" x 27 $\frac{1}{2}$ "
Table with Front Wing: 28" x 27 $\frac{1}{2}$ "
Table-Opening Diameters: 6 $\frac{1}{2}$ ", 3 $\frac{1}{2}$ ", and 2"
Widest Bevel Edge Knife Capacity: 2 $\frac{1}{2}$ "
Widest Wing-Type Cutter Capacity: 3"
Largest Diameter Cutter Capacity: 6 $\frac{1}{4}$ "
Vertical Spindle Travel: 1 $\frac{3}{4}$ "
Spindle Diameter at Ball Bearings: 1"
Height from Floor to Table: 35"
Power: $\frac{1}{2}$ h.p. for Cutters 3 $\frac{1}{2}$ " and less.
1 h.p. for Cutters over 3 $\frac{1}{2}$ "
Two Models: 7,200 or 10,000 r.p.m.

Boice-Crane, with its complete line of power tools, can, at minimum cost, completely equip a contractor's shop that will make you practically independent of the mill.

For a guarantee of satisfactory service specify only the products of established manufacturers who **SPECIALIZE** in producing power tools, rather than making them a sideline.

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BAND SAWS • JOG SAWS • SAW JOINTERS • BELT SANDERS
SPINDLE SANDERS • LATHES • THICKNESS PLANERS
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C. W. Dietterich to Head Industry-Wide Testing for Southern Plywood Ass'n

EMBARKING upon a long-range plan of product betterment, members of the Southern Plywood Manufacturers Association have adopted institute industry-wide testing of their panel products and named C. W. Dietterich a quality control authority, to effect the program.

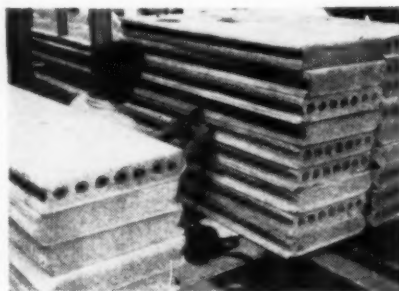
Dietterich, for several years inspector for Douglas Fir Plywood Association, the trade-promotion organization for Pacific Northwest panel makers, is the new managing director of the southern plywood organization. He was named at a recent annual meeting of the group at its Atlanta, Ga., headquarters.

At the same time, the southern manufacturers elected E. B. Meyer-cord of Mobile, Ala., association president, and Joseph Gall of Dillon, S. C., vice president. Meyer-cord is president of Meyer-cord Compound Lumber Co., and Gall is manager of Wilson Smith Veneer Co.

Southern Plywood Manufacturers Association is comprised of firms operating 28 factories in seven southeastern states. They produce hardwood plywood both in stock panel sizes and for furniture uses. The association was formed in 1946.

New Type Panel Used In Garage Building

COMPLETION of their first building, in which a new material and a new building technique were employed, has been announced by Durisol, Inc., 420 Lexington Ave., N. Y. The new prod-



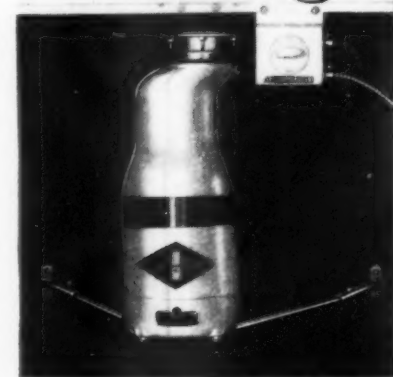
IMPREGNATED felt weatherproofs Durisol

uct, Durisol, is a light-weight, multi-purpose building material; the new method is designed to cut construction time in half.

In Durisol's new building, a five-car garage in New Canaan, Conn., Durisol panels were used. They were pre-coated with waterproof cement plaster at the factory to (Continued to page 180)

IN-SINK-ERATOR Garbage Disposer

Model "900"!
**WITH SIMPLIFIED
ELECTRICAL HOOK-UP
FOR EASIER
INSTALLATION**



The IN-SINK-ERATOR Model "900," built on the integral design principle employed by IN-SINK-ERATOR for ten years (longer than any other in the disposer field) comes complete with a positive acting, reversing control switch and a simplified electrical hook-up for easy installation in custom dwellings or project housing. IN-SINK-ERATOR's automatic reversing action, complete self cleansing streamlined design and two-directional shredding have set the pace for ten years. It's the disposer the plumber likes, too . . . because it's distributed

EXCLUSIVELY THROUGH PLUMBING CHANNELS.



The IN-SINK-ERATOR story will be repeated to consumers 23,000,000 times in five of the leading household magazines in the country during 1948.

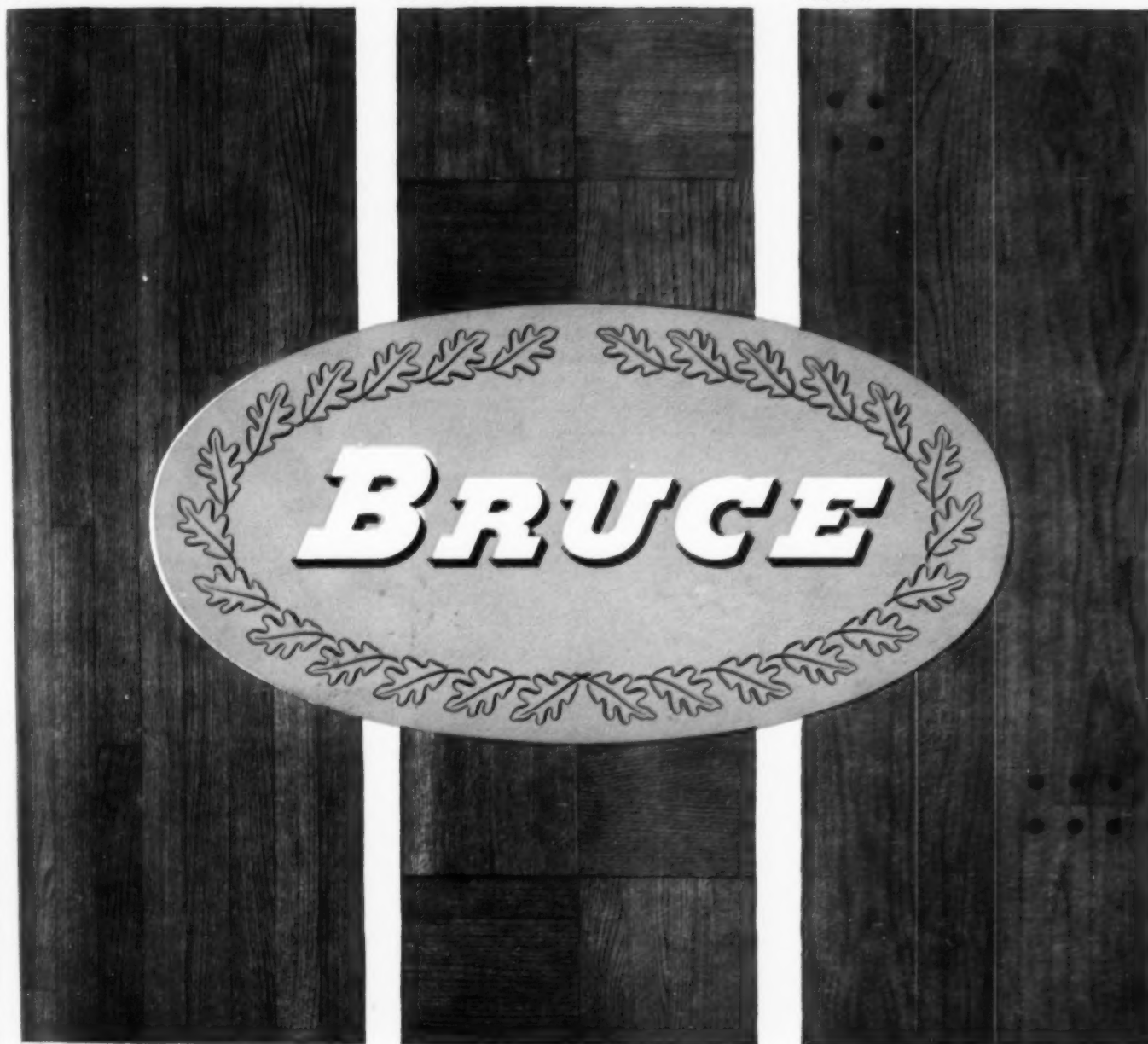
IN-SINK-ERATOR
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Exclusive Manufacturers of Automatic Garbage Disposers Since 1938

STRIP

BLOCK

PLANK



A name you can depend on for Finer Hardwood Floors

Remember way back when the only hardwood floors in your home town were in the big mansions? Very likely those were Bruce Hardwood Floors, for over thirty years ago architects and builders started depending on Bruce for finer hardwood flooring.

In the intervening years, Bruce has made many advances in the technique of producing finer hardwood floors. Distinctive styles of flooring have been developed, as well as special types to fit modern architecture and

construction. Bruce has given longer life and more beauty to hardwood floors through improved finishing methods and materials.

Today, in almost every town in America, Bruce Hardwood Floors are found not only in the mansions and "show places," but also in the modest houses built to meet a price. More than ever before, Bruce is a name you can depend on for finer hardwood floors. E. L. BRUCE CO., MEMPHIS, TENN. *World's Largest Maker of Hardwood Floors.*

BRUCE HARDWOOD FLOORS



Prefinished and Unfinished



Only the
FAN-GLO HEETAIRE
gives you . . .

- ☒ **ADDED EXTRA PROFITS**
your customers . . .
- ☒ **ADDED EXTRA WARM COMFORT QUICKLY**

The 230 Series Built-In Wall FAN-GLO HEETAIRE is the only recessed heater built that gives both kinds of heat — abundant infra-red rays plus abundant fan-forced heated air. Its infra-red rays heat all the humans in the room — quickly!

It gives you MORE PROFITS! Because it's backed by powerful selling ammunition — a dynamic convincing "Best Seller" sales manual . . . plus a veritable arsenal of new literature — catalog and specification sheets and charts . . . plus national magazine and newspaper advertising that drives home to millions of prospective customers the fact that FAN-GLO HEETAIRE is the only heater built that gives BOTH kinds of heat!

Call your jobber—he's all set to help you make more sales—more profits. Ask him about the 200 and 240 series of Heetaires too!

Only the FAN-GLO HEETAIRE has ALL these features:

- Infra-Red Rays
- Patented Neo-Glo Elements
- Fan-Forced Heated Air
- Exclusive Two-Heat Feature — choice of HI-LO Heats
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- Easy to Install
- Underwriters Approval
- Guaranteed for One Year

Now available in
IVORY, BROWN and NUCROME FINISHES



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MARKEL ELECTRIC PRODUCTS, INC.

LA SALLE LIGHTING PRODUCTS, INC.

151 SENECA ST. ● BUFFALO 3, N. Y.

(Continued from page 178)

eliminate cost of on-the-site finishing; were placed between studs spaced four feet apart, instead of the usual two-foot interval. This, Durisol claimed, saved 50 per cent on lumber. No mortar was needed, since a mastic made the joints waterproof.

The estimated cost of the 9,000 cubic foot building constructed with conventional materials was \$6,000; Durisol constructed it for \$3,600.

New President for Comforts Products Corporation

ROLAND D. DOANE, Chicago, widely known sales executive in the building materials field, has been elected president of Comfort Products Corp., Milwaukee. Elected vice president and general manager was Walter Ericson who is president of Insulating Service, Inc., Milwaukee. H. H. Bowen is treasurer. Comfort Products was incorporated last year to handle materials particularly in the home building field including the Ingersoll Utility Unit, Vitroliner flues and Ingersoll KoolShade and Storm-Shade. The company's territory includes a tier of southern Wisconsin counties and the counties fronting on Lake Michigan up to the northern peninsula.

New Available Fuel Source May Result From Process

A **HUGE** new source of fuel will be made available in coming months, using a new process for converting millions of tons of anthracite silt into fuel gas, Frank W. Earnest, Jr., president of the Anthracite Institute, has announced.

In another form, this gas produced from a hitherto waste anthracite material will provide synthetic petroleum-products and chemical synthetics such as ammonia and methanol.

Two hundred million tons of anthracite silt are immediately available for such conversion. Since the average annual production of anthracite coal is about 50 million tons, this represents about four years total production of all anthracite. Large additional resources for gas conversion can be anticipated yearly because ten per cent of annual production is anthracite silt.

Anthracite silt, according to Dr. Raymond C. Johnson, vice president in charge of research of the Anthracite Institute, is an excellent fuel for the production of these gases because "it is non-choking, non-caking, free of tar, has a low sulphur content and a high ash-fusion temperature."



WORLD FAMOUS Red Devil GLASS CUTTERS

Scientifically Designed for Perfect Cuts—Relaxing to Use—

G1

CAN'T RUST



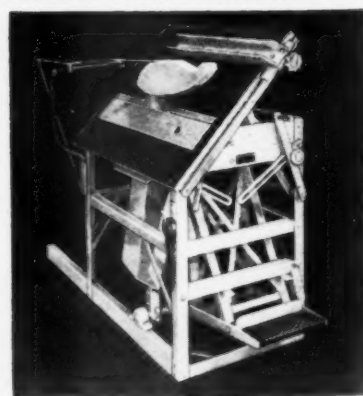
O24

Twelve in a display

Chapmanized steel RED DEVIL wheel—Can't be imitated

A Product of
Red Devil Tools.
IRVINGTON 11, NEW JERSEY

SPEED YOUR JOBS



BUY BEARCAT!

You'll finish jobs faster with a Bearcat! Speedy foot-pedal swing cut-off . . . Rip; cut-off at all angles . . . Portable from job to job . . . Rugged welded steel frame and top . . . Heavy-duty ball bearings. Two sizes: XJR for home builders, X C O for heaviest jobs. **QUICK DELIVERY.**

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THE PAXSON CO.
5 "D" Ave., Dowagiac, Michigan

BUILDING BEARCATS FOR 25 YEARS

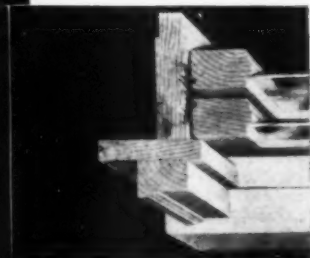


* *Mark* of distinction
on the window
of distinction

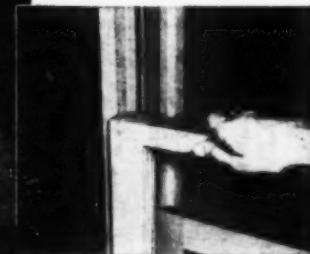
This is the Superior Window that Bilt-Well Master Craftsmen so proudly offer . . . advanced design! Sturdily constructed! Smooth operation!

Yes, their "experience" . . . their "skill" and their "expert knowledge" developed a *Superior Window* . . . one in which the weatherstrip compensates for swelling and shrinking . . . maintains snug fitting, weather-tight windows . . . easy, quiet and smooth sliding.

Truly—the window of distinction!



Light, snug contact between sash and weatherstrip at all times, no stick, no dust, no draft.



Sash may be removed easily and quickly without loosening or removing the weatherstrip.

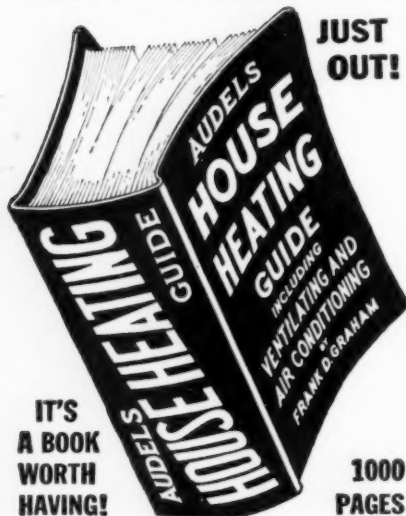
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A BOOK
WORTH
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A. B.

Plywood Manufacturers, Government, to Handle Distribution Problems

NORTHWEST plywood manufacturers and government officials will jointly tackle the problem of channeling plywood to current housing needs, Arnold Koutonen of Olympia, president of Douglas Fir Plywood Association, announced.

Koutonen, who is also general manager of the plywood division of St. Paul & Tacoma Lumber Co., said "Ten plywood manufacturers have been invited to the capitol to represent the 48-factory industry, and we are anxious to cooperate as we have in the past."

In introducing the government's plan to panel makers, Mathias Nienwenhous, consultant in the Department of Commerce Office of Industry Cooperation, advised that the plywood industry "has an enviable record for its cooperation with government agencies."

Industry advisory committees for consultation as to possible voluntary allocation of materials for critical uses were recently authorized by Congress, and specifically implemented by an executive order of President Truman. Already similar conferences have been called with steel producers, agricultural equipment manufacturers and other industries.

According to a ruling of Attorney General Tom C. Clark, such joint actions are entirely in accord with anti-trust laws, a point the plywood spokesman stressed.

Production of Douglas fir plywood today is at the all-time record rate of about 37 million square feet a week, Koutonen reported. More than half of the output is going into housing, most of it delivered through the nation's 25,000 retail lumber dealers, he said. The remaining plywood goes to industrial users such as railroads, boat builders and furniture firms, historically heavy users of the material.

Dealerships Offered

DEALERSHIPS for the first time are being offered on their established line of portable electric saws, disc sanders and belt sanders for the building industry, it was announced by W. B. Crew, executive vice president and general manager of the American Floor Surfacing Machine Co., Toledo, Ohio. This line has previously been handled by a limited number of American representatives. Greater demand, plus greater production facilities have now made it possible to offer these tools to dealers in the building trades, Mr. Crew declared.



MITER

COMPOUND

BEVEL

MITER

SAND

DRUM

CUT

PLANE

MITER

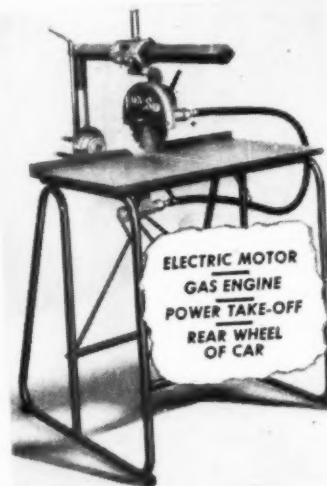
BEVEL

COMPOUND

MITER

BEVEL

The beaver does a good job, but he does it the hard way. Don't wear yourself out on the end of a hand-saw, or struggle with heavy, cumbersome mechanical saws that waste your time and are only half accurate.



FLEXSAW

MAKES ANY CUT

Use it for Production Work, Construction out on the Job, or in Job Shop or Hobby Shop

A rigid, rugged, accurate, portable saw that makes cuts 3" deep and up to 15' wide. Knocks down into two 55 lb. units for transport in any car. A truly ONE MAN portable saw. Ideal for farm use, builders, hobbyists.

Rapid adjustment for any cut—no wrenches required. Rigid in all positions. Large, easily read dials for setting all cuts, eliminate all guesswork.

Lifetime Fafnir ball bearings. Highest quality, flexible drive shaft. Balanced tubular base.



priced so anyone can own it \$125

SEE YOUR LOCAL DEALER, OR WRITE DIRECT TO:

Less Motor
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Factory
GUARANTEED

THE FLEXSAW CO.
PORT AUSTIN, MICHIGAN



SPOT these \$38

BENCH GRINDERS

Around Your Shop or Jobs

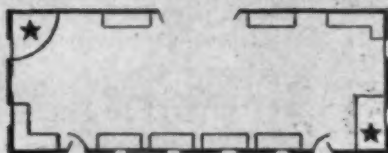
SAVE STEPS— SAVE TIME!

AT THIS
LOW PRICE

YOU CAN USE SEVERAL
BLACK & DECKER 6" STANDARD

BENCH
GRINDERS

KEEP THEM HANDY



for
Your Workers!

MANY PRACTICAL FEATURES!

- Constant speed Black & Decker 1/4 H.P. motor gives ample power for "run-of-shop" jobs—yet is economical to run.
- Full-size ball bearings on rotor and wheel spindles; covered by protective sleeves.
- Tool rests locked in base grooves with winged nuts for easy adjustment.
- Base equipped with four rubber feet for benchwork use, or units may be quickly bolted to new streamlined pedestals for spotting anywhere in the shop.
- Wheel guards are cast integral with the motor housings. One medium 6" Grinding Wheel and one 6" Wire Wheel Brush are included as standard equipment.

SPEED UP

Grinding, Buffing, Wire Brushing!

Black & Decker 6" Standard Bench Grinders are so low in cost and power consumption that it pays to buy several. One for your shop . . . one or more to spot within easy reach of workers on your jobs! With grinding wheels, these sturdy, well-balanced Bench Grinders keep tools sharp and clean to speed up building jobs. With B & D "Whirlwind" Wire Wheel Brushes, they remove rust; clean construction tools and machinery parts. Ask your nearby Black & Decker Distributor for a demonstration.

Write for free catalog to: The Black & Decker Mfg. Co., 666 Pennsylvania Ave., Towson 4, Maryland.

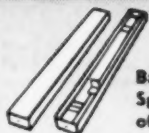


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Black & Decker

PORTABLE ELECTRIC TOOLS

THE A.B.C. of ATLAS SAVINGS



Basic unit, the
Speed Panel, made
of rugged steel.



Ingenious, quick-
action Wedge Bolt.
For rapid joining
or stripping.



Speed Panels combine
into units of two or
more for quick handling.



Forms are quickly
positioned for
easy pouring.

Light and sturdy.
Easy wall assembly.
Rapid stripping.



Forms assembled
into multi-unit
panels for rapid
crane handling.

Address mail
inquiries to
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294 Washington Street
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MIAMI, FLORIDA
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TACOMA, WASH.
2412 N. 10th Street
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43 Cedar Street

Make us PROVE it!

Atlas Speed Forms Cut to *50% Off Your Poured Concrete Costs BECAUSE

1. They cut Form Costs in half.
2. They cut On-Site Labor in half.
3. They're easy to assemble, strip, store.
4. Forms last indefinitely. Many contractors have had 400 uses, are still going strong.
5. On job after job, for hundreds of contractors, on large and on small operations, Atlas Speed Forms drastically reduced costs.

Let us prove it! At our expense and with no trouble to you. Send in the coupon below, it will bring you a data sheet to be filled out. We will then furnish you with a verified estimate on your form work and you can figure the savings for yourself. Five minutes of your time against a fifty per cent saving—the odds are in your favor! And here's the coupon....

* An average figure. Of course special cases will prove an exception. But we may surprise you!

SO LIGHT
A CHILD CAN
LIFT THEM



**IRVINGTON
FORM & TANK
CORPORATION**
IRVINGTON 4, NEW YORK

Please send me information on Atlas forms. I am particularly

interested in forms for Walls ☐ Floors ☐ Tunnels ☐ Bridges ☐

Sewers ☐ Columns ☐

NAME

FIRM

ADDRESS

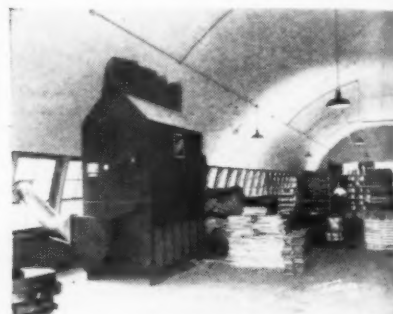
Permanent Quonsets Get New Heating Attention

DRAVO Corp., Pittsburgh, Pa., has recently developed a new type direct-fired Counterflo heater especially adaptable to large quonset structures.

One of these quonset heating units, recently supplied to a radio manufacturing plant in Kokomo, Ind., was installed without making any structural alterations in the building and without the necessity of additional floor space.

To heat this building of 25,600 square feet of floor space, two of the new improved heaters were used in the quonset building supplied by the Stran-Steel Division of Great Lakes Steel Corp., Terre Haute, Ind.

The two heaters, erected by an Indianapolis contractor, provide sufficient heat for comfortable working



OIL-FIRED Counterflo heater, with capacity of 1,250,000 BTU's an hour, meets comfort requirements in quonset plant

conditions because they operate on the principle of "working level recirculation" of warm air.

In this method, air is drawn into the base of the heater from the floor; passed over two staggered banks of economizer tubes leading to the vent stack from the combustion chamber, and discharged, after converging in a short plenum chamber, through directional discharge nozzles on top of the unit.

Since the air moves over the economizer tubes, Dravo Corp. claims a maximum amount of heat energy is extracted from the combustion gases before they are exhausted out the vent pipe.

Two different sizes of heaters used in the permanent-type quonset in Kokomo, discharge warm air at a velocity of 2000 feet a minute. By holding the warm air in the working area, it is possible to achieve a high degree of comfort with minimum loss through the roof. The maximum roof height in this building is approximately 20 feet.

Portability of the Dravo heater is also another suitable factor for a quonset that might be enlarged or moved.

Announcing

the new **SER-WALL** wood-grained panels!

*For Beautiful Walls . . .
That You Can Sell Profitably*

Now, a handsome, practical, economical, *pre-finished* wall panel . . . featuring the beauty of finest walnut grain and the structural properties of tempered Presdwood.

It's the new Ser-Wall, outstanding for homes, offices, display rooms, stores, hotels, restaurants . . . for all commercial and municipal buildings . . . for hundreds of applications in all new building and remodeling.

Your clients and customers will like Ser-Wall for many reasons including (1) *Pre-finished*, durable beauty . . . the smooth, lustrous surface will never peel, chip, crack or warp and is easily cleaned with damp cloth; (2) Ease of application . . . panels come with beveled edges and scored borders which permit butting together for rapid, easy nailing or cementing; (3) Economy . . . initial retail price of about 33 cents per square foot with no additional cost for finishing or future decorating; (4) Versatility . . . panels are available in a number of sizes from 16" x 72" to 48" x 96", all 1/8" thick, to be erected vertically, horizontally, or diagonally, as desired.

Two Ser-Wall grain finishes are now available—cross-fired figured walnut and bleached walnut—with more coming soon. Send now for samples, prices, full details.

Distributors: A few select territories are open. Write today.

SERVICE PRODUCTS

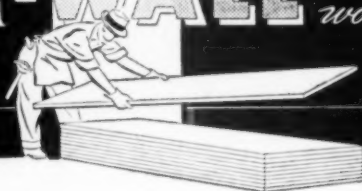
DIVISION

WOODALL INDUSTRIES INC.

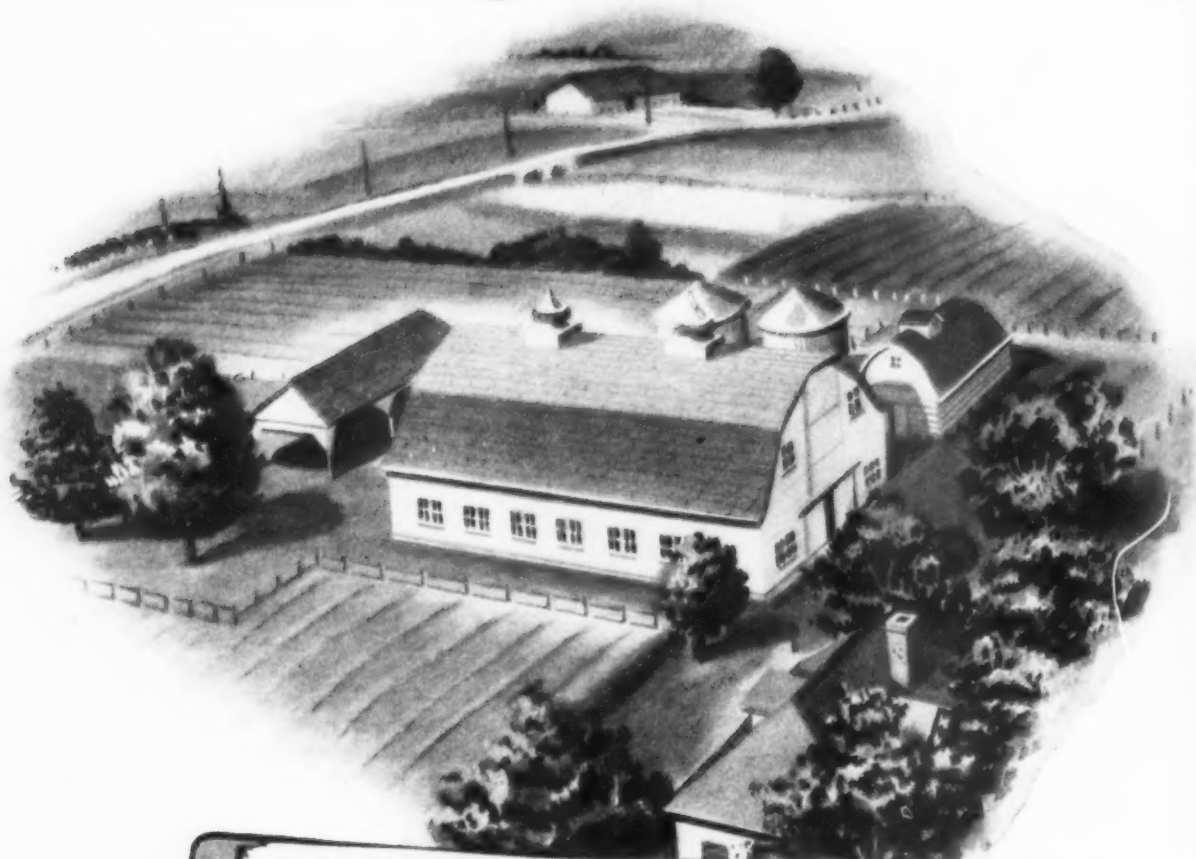
2035 Calumet Avenue • Chicago 16, Illinois



beautiful, prefinished **SER-WALL** *wood-grained panels*



Continuing assurance of b



Over 150 engineered designs of modern farm buildings and equipment . . . huge gothic'arch machine sheds and barns free of posts and space-consuming bracing . . . portable houses specially braced for repeated hauling over rough ground . . . hog houses for year 'round use . . . self-feeders that prevent waste and save labor hours . . . the most complete farm building Service ever developed.

Month after month farmers are reminded that "good wood buildings are the best farm buildings." In leading farm magazines, page dominating advertisements tell the story of extra-value features of all designs of Weyerhaeuser 4-Square Farm Building Service.

better farm buildings built of wood

WITH THE

WEYERHAEUSER 4-SQUARE FARM BUILDING SERVICE

GOOD LUMBER continues to be the best and most economical material for farm building. It is strong . . . durable . . . and probably the most weather-resistant of all materials. It is not uncommon for good wood farm buildings to serve three generations and more.

Wood is an easy material to work with. It is easy to shape, and form and join. The vast majority of farm builders are skilled in the use of wood. Good wood buildings are easier to repair . . . and they can always be

economically remodeled to suit new needs.

Good wood buildings are the best farm buildings.

And now . . . through engineering in lumber . . . and engineering in the design of farm structures . . . you can offer your customers today's best value in farm buildings . . . better than that built of any other material.

With the Weyerhaeuser 4-Square Farm Building Service you can offer good wood buildings of a size and type to meet every farm need. They are designed to increase farm income. They are more economical to build and more efficient in use.

From the 4-Square Farm Building Service you can obtain the blueprints for these engineered farm buildings . . . from the yard of the 4-Square dealer you can obtain the lumber for these buildings . . . and you can use both to give your farm customer a better building for his money.

Protect your position in the farm market by using the 4-Square Farm Building Service to sell better farm buildings built of wood . . . for good wood buildings are the best farm buildings.

WEYERHAEUSER SALES COMPANY

Saint Paul 1, Minnesota



WEYERHAEUSER 4-SQUARE

LUMBER AND SERVICES

How could you miss
with these points
in your favor?

1

PRICED LOW FOR WIDE USE. Mass production of standard types makes this possible.

2

PROMPT DELIVERY. Standardization enables your dealer to carry ample stocks of 3 Basement windows and 1 Utility window to meet most building needs.

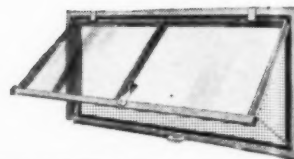
3

FENESTRA QUALITY IN EVERY RESPECT. Well made, easy operating, easily screened . . . Fenestra quality is nationally known.

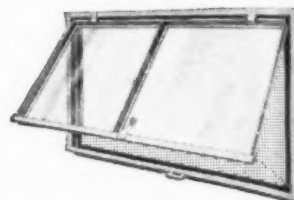
4

SOLD EXCLUSIVELY THROUGH DEALERS. Provides a ready, local source of supply for you.

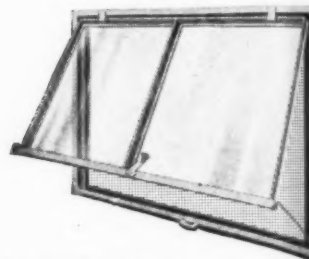
For further information, write to: Detroit Steel Products Company, Dept. AB-6, 2260 East Grand Boulevard, Detroit 11, Michigan.



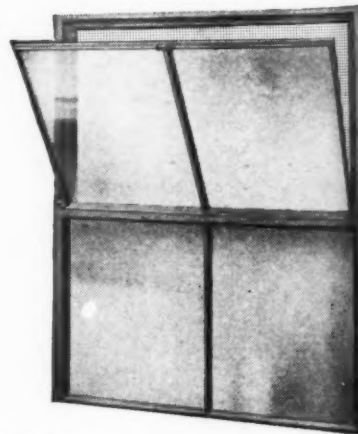
Basement Window
Two-Light, 15" x 12"



Basement Window
Two-Light, 15" x 16"



Basement Window
Two-Light, 15" x 20"



Utility Window
Four-Light, 15" x 20"
All-metal screens available for all four windows.

Fenestra

for the best deal in

BASEMENT and UTILITY WINDOWS



**"And—Next Time—
Make Sure It's
YALE Hardware!"**

In the new RKO hit, "Mr. Blandings Builds His Dream House", Cary Grant and Myrna Loy (Mr. and Mrs. Blandings) didn't tell Reginald Denny to specify *quality* materials throughout. Before the picture is over, they wish they had.

For generations, the top quality name in builder's hardware has been YALE, and the procession of new modern YALE hardware promises to increase further the universal preference for the YALE brand.

When you install YALE hardware, your customer will recognize it as an indication of a *well-built* house.

THE YALE & TOWNE MANUFACTURING COMPANY
Stamford • Connecticut • U. S. A.

Makers of the famous YALE lines of locks, Door Closers, Hardware



Front and Back Door
"Packages of Protection"

See YALE's new "packages of protection". Shown is XP1 Front Door Set—tubular latch set and tubular deadlock with matching cylinder collar.

TRADE **YALE** MARK

HARDWARE

SIGN OF A WELL-BUILT HOUSE



Mr. & Mrs. Blandings, whom you know as Cary Grant and Myrna Loy, shown at Dream House entrance.

**Keep Your Dream House from
Being a Headache**

Hardware "horrors" are funny in a movie, but not in your house.

To avoid the same troubles Cary Grant and Myrna Loy had with hardware in "Mr. Blandings Builds His Dream House", specify YALE.

For generations the name YALE on hardware has been a dependable sign of the well-built house. It is your best guarantee of long-lasting beauty and smooth functioning of the parts of your house—doors, windows, cabinets—that move on hardware.

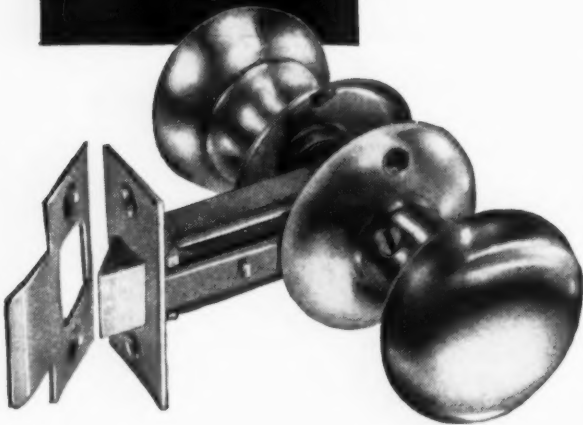
THE YALE & TOWNE MANUFACTURING CO., Stamford, Conn., U. S. A. Makers of the famous YALE lines of locks, Door Closers, Hardware, Pumps, Hoists and Industrial Trucks.

Write for your copy of "Your Home 'Moves' on Its Hardware", a handy guide that everyone should have who is planning a home. Tells about materials, finishes and patterns. Provides a check-list which your architect, builder or hardware dealer can help you fill out. Send 10¢ for this USEFUL BOOKLET—practical 8-page guide to hardware.

YALE

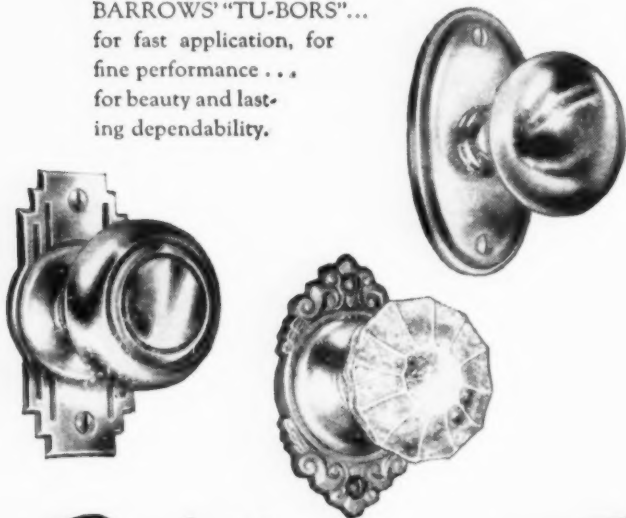
This ad featuring the "Sign of a Well-Built House" appears in SATURDAY EVENING POST, June 26th.

BARROWS
"TU-BOR"
TUBULARS



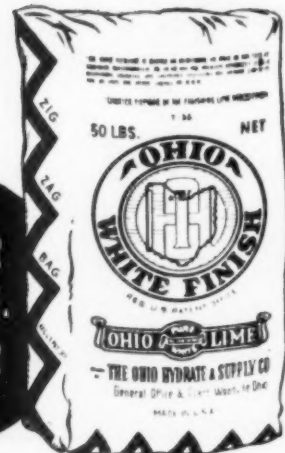
A PROUD NEW LINE

In tubulars, ACTION speaks louder than words. The crisp, sure action of BARROWS' new "TU-BORS" comes from the sound use of long-proved engineering principles. And from the tough metals from which they are made. Here is a proud new line backed by over fifty years of experience in hardware manufacture. You can bank on BARROWS' "TU-BORS"... for fast application, for fine performance... for beauty and lasting dependability.



Bank on-
BARROWS
NORTH CHICAGO, ILLINOIS

CONSIDER
LIME
PLASTER



It does not rattle . . .

It does not buckle . . .

It does not come in modular sizes . . .

You don't nail it, screw it, suspend it. You don't fasten it TO your walls or ceilings . . . because it is PART of those walls and ceilings, an integral, monolithic part of the entire building.

To the DESIGNER, it fits willingly his every form of expression. The flat surfaces, the angular; the inside, the outside curves. And any decorative treatment may be achieved, to become an integral part of the whole.

To the OWNER it provides the satisfaction of a smooth, clean, joint-free job, that is vermin-proof, rodent-proof, fire safe and acoustically right. More economical in first cost than any "Substitutes", it is its long life that affords real life-long economy.

And for the best in fine finishing lime, remember Ohio Hydrate's brands:

"Ohio White Finish" and "Hawk Spread".

They are identical.

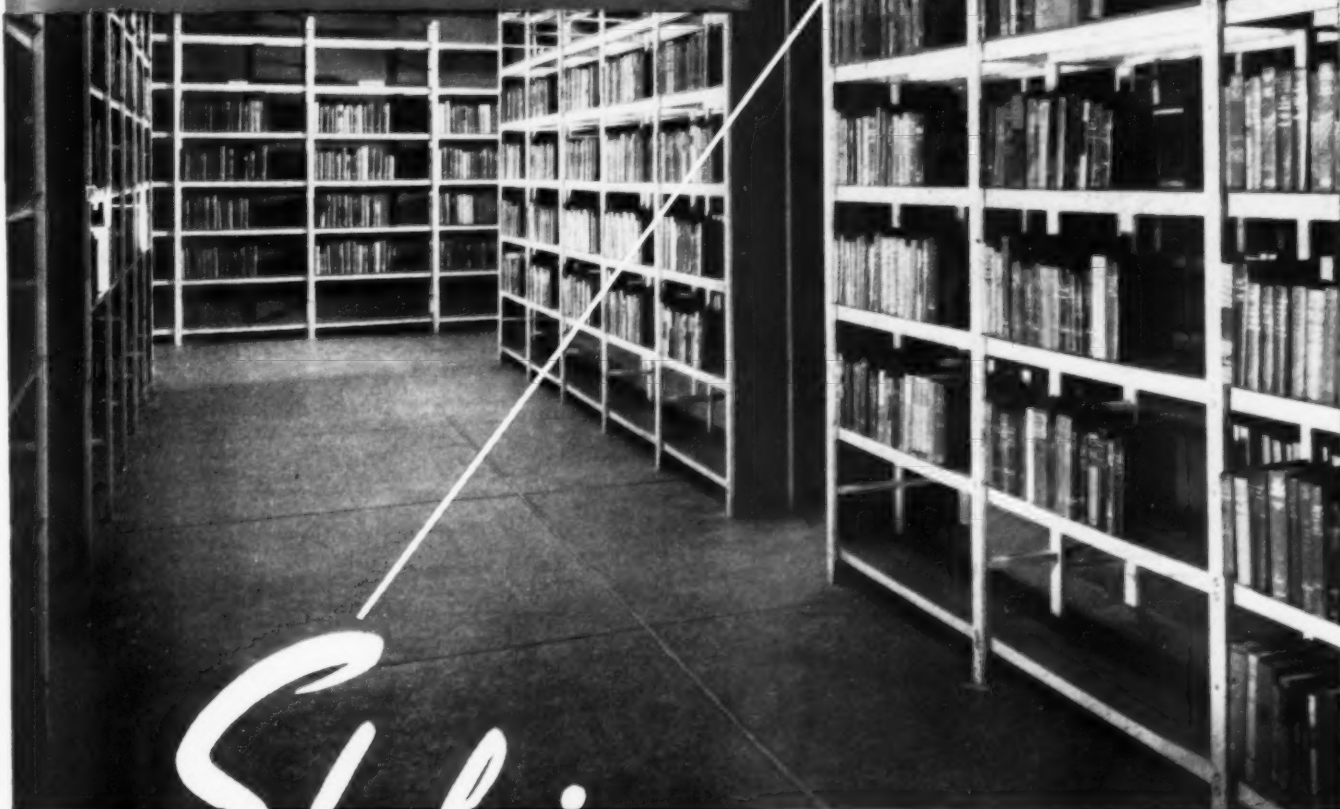
They have no equal.



THE OHIO
HYDRATE
& SUPPLY
COMPANY
WOODVILLE
OHIO

HINES-SHELF

A NAME TO REMEMBER
WHEN YOU BUY



Shelving

FOR LIBRARIES—STOREROOMS AND OFFICES

Schools and universities are finding that these strong, prefabricated shelving units meet the needs for additional book stacks at large savings in money. Made with a framework of clear Ponderosa Pine, fastened together with a patented, cadmium plated hardware bracket and with Masonite Temperd Presdwood to serve as shelves and ends, Hines-Shelves can be erected by unskilled labor. Everything comes to you, carton packed, ready for quick, easy assembly and the framework can be painted or stained to harmonize with any color scheme.

EDWARD HINES LUMBER CO.
2431 SO. WOLCOTT AVE., CHICAGO 8, ILLINOIS

IMMEDIATE DELIVERY—Standard starter and extension units measure 34 in. high, 36 in. wide, 11½ in. deep with 3 shelves; 36 in. by 11½ in. are ready for immediate delivery. Where quantities are large, special sizes will be made to order.

EDWARD HINES LUMBER CO.
2431 SO. WOLCOTT AVE., CHICAGO 8, ILLINOIS

Please send us name of nearest distributor and full information on Hines-Shelves.

Name.....

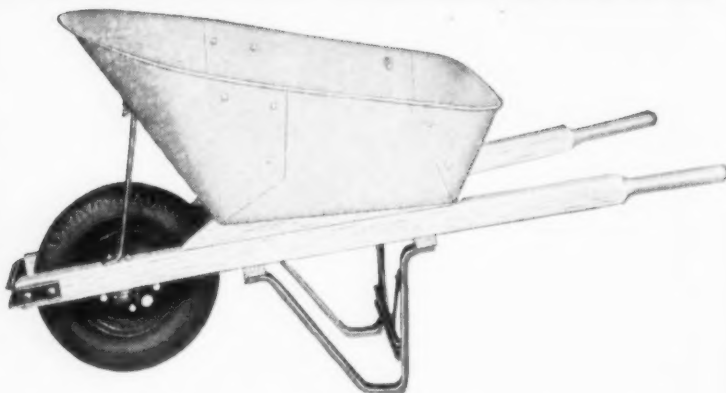
Address.....

City.....State.....

BUCH 'BARROWS FOR BUILDERS

**HEAVY-DUTY
ALUMINUM TRAY**
Wheelbarrows
FOR ALL 'ROUND USE

**LIMITED QUANTITIES
IMMEDIATELY AVAILABLE**



The aluminum tray Buch 'barrow #455 shown is an ideal general purpose 'barrow. This rugged, yet lightweight, 'barrow is built to take all the abuse that can be given it. It is formed of specially rolled aluminum alloy sheets. It's rough and tough, yet well balanced, easy to handle. The perfect all-around contractor's 'barrow. 5 cubic feet capacity. 17 pounds lighter than equivalent 'barrow with steel tray. Limited quantities are available for immediate delivery. Write or wire your jobber today.

BUCH MANUFACTURING CO.

ELIZABETHTOWN, PA.

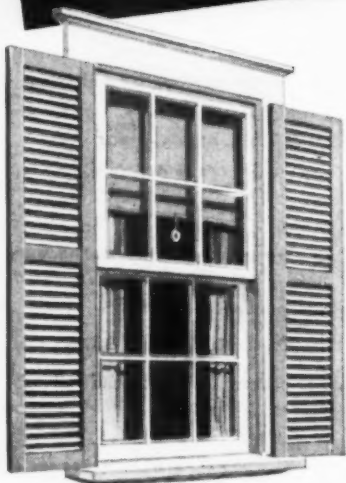
Carrying the Load



Since 1868

ANDAL ALL-ALUMINUM WINDOW SHUTTERS

*Durably Finished in Green**



3 BIG ADVANTAGES

Beauty

Attractive designs add to the value appearance of any home.

Permanence

All-aluminum construction—will never warp, rust or rot.

Low Cost

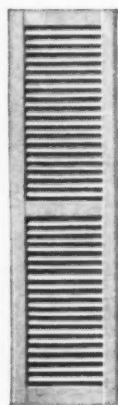
Low price saves money—beautiful paint finish lasts for years.

Write today, for complete information and prices

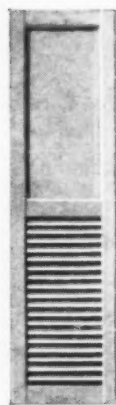
ANDAL

NEW NAME OF TEL-O-POST CO.

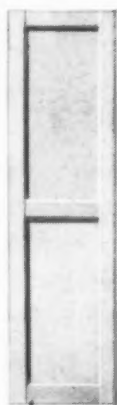
BEAUTIFY HOMES INCREASE VALUE ATTRACTION AT LOW COST



FULL LOUVER



HALF LOUVER



PLAIN PANEL



BATTEN TYPE

Immediately available in all standard sizes. Special sizes made to order. Green color standard.

* Blue, Red and White optional on orders for 50 pairs or more.

ANDAL Manufacturing Company

126 Ash St., AKRON 8, OHIO

TORNADO STRIKES!



but RUBEROID TITE-ON SHINGLES stay put!

• Every big storm brings new Tite-On customers—people who have seen with their own eyes that these truly windproof shingles stay firmly anchored when other shingles rip loose and blow away!

Look at these photographs—taken immediately after the recent tornado that swept the Mid-West—for convincing proof of Tite-Ons' performance.

The two barns shown here stand only a few feet from each other, were exposed to the same wind. The barn on the left was roofed with Tite-Ons—contrast it with the badly damaged roof on the smaller building.

The house in the photograph below was blown more than three feet off its foundation—not a single Tite-On came loose!

No wonder Ruberoid dealers find Tite-On sales are booming—every farmer and house owner is an active prospect!



The **RUBEROID** Co.

TITE-ON SHINGLES

Building Materials for Farm, Home and Industry

Executive Offices: 500 Fifth Ave., New York 18, N. Y.

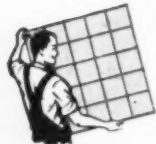


THE EASY-TO-SELL, QUALITY TILEBOARD!

Inexpensive! Beautiful! Enduring! Here's reason why Prestile is the popular tileboard for remodeling or new construction. It's *panel-size*—easy to install—easy to clean. Wide range of glistening pastel colors are *baked-in* by a special process for permanency—offers customers unlimited decorating effects! Write today for details and prices.

9 Color Combinations

- WHITE with black or red score lines
- PEACH with white score lines
- BLUE with white score lines
- GREEN with white score lines
- IVORY with white or black score lines
- YELLOW with white or black score lines
- ORCHID with white score lines
- RED with white score lines
- BLACK with white score lines
- PLAIN—unscored in all colors.



QUICKLY INSTALLED
OVER NEW AND
OLD WALLS

5 Popular Patterns

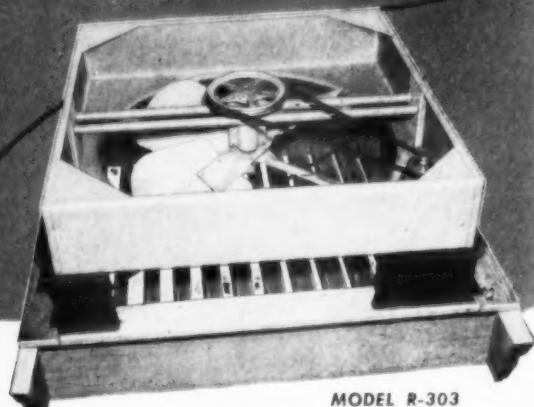
- 4-inch square—Regular tileboard
- 8-inch square—Large tileboard
- 4-inch Streamline—parallel lines
- 8-inch Streamline—parallel lines
- Plain—unscored colored panels

Nationally advertised in
leading magazines!

PRESTILE
MANUFACTURING COMPANY

2860 LINCOLN AVE., CHICAGO 13, ILL.

You can sell today's home buyer
with the LAU *Rancher*



MODEL R-303

▼ An outstanding new addition to
the famous LAU "Niteair" profit-making
line of fans.



Today's home buyer wants
the modern conveniences al-
ready installed when he buys.

What greater inducement can you have than to as-
sure him of cool, relaxing comfort during the day
and refreshing, healthful sleep at night. You'll be
amazed at the ease and simplicity of installation
which will put additional profit dollars in your
pocket. Built especially for modern homes of low-
pitched roof construction.

Many outstanding features insure
superior performance at low-cost

- | | |
|--|--|
| ✓ Complete Package Unit—4 bladed fan | ✓ Air Tight Cushion Seal |
| ✓ Vertical Air Flow — Horizontal Mounting — Belt Drive | ✓ Automatic Control, Fuse Link Switch |
| ✓ Automatic Ceiling Shutter with Aluminum | ✓ Automatic Time Switch (accessory) |
| ✓ Fire-Resistant Sheet Metal Ple-num | ✓ Sealed Bearings for All Moving Parts |

For an economical, long lasting, cooling
unit of rugged construction, investigate
the LAU Rancher, Model R-303, today!

Write Dept. "B" for complete information or
contact your jobber today!



ARE CONTRACTORS PECULIAR PEOPLE?



WE don't think so—but some contractors, like all of us, have peculiar ideas. For example, they finish a house, paint the outside, paint the woodwork inside, paint or paper the walls, yes and sometimes they paint the common brick exterior, and even the garage gets its coat of paint, but down below grade level—that all important basement—doesn't get a dime's worth of paint.

But, today's smart contractors are not at all "peculiar" about finishing the basement. They realize that here is one of the most useful parts of the house—available space for playroom, recreation room, work shop, laundry. That's why the basement of today is receiving its share of paint.

ON BASEMENT WALLS

In this era of better basements, Medusa Portland Cement Paint, made by a cement company, is first choice for sealing and decorating basement walls. This quality cement paint has been used successfully for 28 years on all concrete, stucco and masonry surfaces. It mixes with water, needs no undersealer or preparation coats. Can be applied to green concrete, covers fast with a brush or flows smoothly from a spray. It penetrates deeply and effectively seals as it decorates. Offers eight colors plus black and white.



AND HERE'S WHAT TO DO ABOUT CONCRETE FLOORS

No need to leave the concrete basement floor unfinished. Give it a beautiful, permanent, colorful finish with Medusa Floor Coating. This paint has a new rubber base that bounces off wear. It resists abrasion, is proof against alkalis, water and cleaning compounds. It can be used not only on basement floors but on exterior concrete such as porches, porch floors, swimming pools, walks, etc. Your choice of five beautiful colors, black and white. Send coupon below for free copy of the booklet, "Painting Concrete, Stucco and Masonry."



MEDUSA PRODUCTS DIVISION

of MEDUSA PORTLAND CEMENT COMPANY

1002-3 Midland Building • Cleveland 15, Ohio

Gentlemen: Please send me a copy of the free booklet, "Painting Concrete, Stucco and Masonry."

Name Please Print

Address

City State

Also made by Medusa Products Company of Canada, Ltd., Paris, Ont



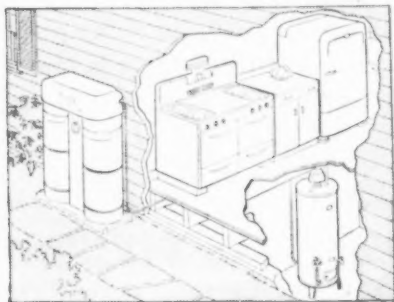
KITCHEN HELPERS FOR HOMES BEYOND THE GAS MAINS

Why not give your clients the extra "hands" they need to make their homes completely livable? When building homes beyond the gas mains specify a PYROFAX gas installation. With it, you can offer the *extras* of a gas-operated refrigerator, range, and water-heater. These are the appliances home-buyers need and want—and with a PYROFAX gas installation you can be sure of complete satisfaction.

For more information, see our catalog in Sweet's File, or write to PYROFAX Gas Division, Dept. B-5, Carbide and Carbon Chemicals Corporation, New York 17, N. Y.

• • •

No special preparations are needed for a PYROFAX gas installation. The whole unit is easily installed above ground ready for immediate service. PYROFAX gas is insurance against service interruptions caused by bad weather and provides a dependable supply of fuel for cooking, heating, and refrigeration.



Pyrofax
TRADE MARK
SUPERIOR BOTTLED GAS SERVICE



Product of a Unit of Union Carbide and Carbon Corporation.

TROUBLE-SAVERS *Adjustable* STEEL SCAFFOLDING for Every Purpose

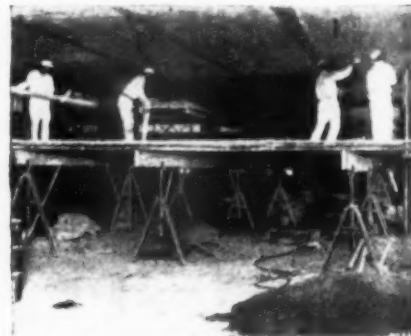


SAFE!
STRONG!
ECONOMICAL!

ADJUSTABLE STEEL TRESTLES



Details of the quickly-adjustable "Trouble-Saver" Steel Trestle.



Trouble-Savers, easily adjustable for length as well as height, give lasting service.

Builders, contractors, maintenance men and others save time, labor and material with "Trouble-Saver" Adjustable Steel Trestles. They provide a safe, sure, low-cost method of handling all overhead work in a wide variety of conditions.

SCAFFOLD BRACKETS



Nail-Attached Brackets



Studding Brackets

Made of rail steel, Scaffold Brackets simplify the installation of safe working platforms for various types of side wall work. Light, easy to handle—they are real time and money savers. You profit on every job.



Write for new catalog and complete information on all types of "TROUBLE-SAVERS" equipment.

THE STEEL SCAFFOLDING CO., INC.

856 Humboldt St., Brooklyn 22, N. Y.

Telephone: Evergreen 9-2802

Will this take place in your houses next winter?



Not if they heat with anthracite!

No house is a fuel orphan with the "Unbeatable Heating Combination"!

● Experts predict that the shortages of other fuels will last from 3 to 5 years. With the "unbeatable heating combination," your clients never need to be cold, because they can have the heat they need when they want it!

The "unbeatable heating combination" of an automatic hard-coal stoker plus plentiful anthracite will keep your houses warm... clients comfortable and satisfied these three ways:

Plenty of Heat—A full year's supply of plentiful, stoker-size anthracite can be easily

stored. Occupants need never turn their thermostat to chilly levels to conserve fuel.

Economical Heat—Stokers use the smaller, cheaper stoker sizes of hard coal... reduce fuel bills as much as 52%.

Completely Automatic Heat—Modern hard-coal stokers are fully automatic... from bin feed to ash removal. Sensitive thermostatic controls keep heat steady regardless of outside temperatures.

Get all the facts on heating with all types of anthracite equipment including modern automatic stokers. Simply fill out and mail the coupon today.

Manufacturers of approved automatic anthracite burners

Stokers

ANCHOR STOKER
COOPER STOKER
ELECTRIC FURNACE-MAN
FAIRBANKS-MORSE STOKER
FUEL SAVERS STOKER
THE GILKOAL STOKER
IRON FIREMAN
MOTORSTOKOR
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That's one advantage of oak floors that is becoming increasingly important. With new trends in home furniture and furnishings, it is imperative, for most buyers, that they don't need to change floors or floor coverings every time they buy a new chair or change the colors and pattern of wallpapers, drapes or paint.

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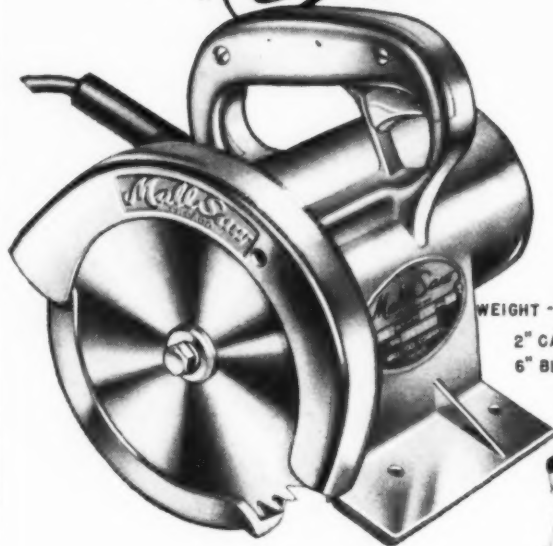
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WEIGHT - 8 3/4 LBS.
2" CAPACITY
6" BLADE

EQUIPPED AS SAW TABLE

The **MODEL 60**
Mall Saw
REG. U.S. PAT. OFF.



The Model 60 MallSaw eliminates the need for many expensive, one-purpose tools . . . minimizes maintenance and upkeep . . . and mechanizes jobs otherwise done by hand. Used as a hand saw, this one tool cross-cuts, rips and angle cuts almost any material from wood to steel. As a table saw, it can be equipped for shaping, drum or face sanding, drum grinding, wire brushing, sharpening tools and many other applications by simply changing attachments. Its lightweight metal table stand, fitted with miter gauge and rip guide, is easily carried by one man. Other MallSaws with 2 1/4", 2 7/8" and 4 1/2" capacities are available for 115-volt AC-DC or 230-volt AC-DC.

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- LIGHT IN WEIGHT
- SOLDERED FITTINGS
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- LONG LENGTHS
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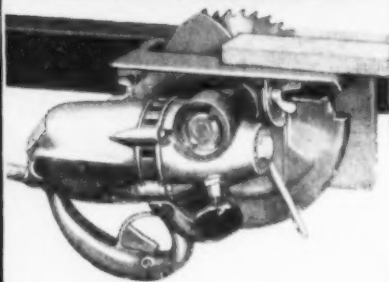
Easy!



ABOVE: Fred W. Wappat Saw trimming sheathing that has been nailed in place.

RIGHT: Fred W. Wappat Saw hung inverted over cleat on saw horse, performing ripping operation.

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**ELECTRIC HAND SAWS
ARE BALANCED FOR
FATIGUE-FREE, SAFE
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SMOOTHLY IN ANY
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No other siding has all these advantages!

Construction of an 8-room home in fashionable Atherton, California, proves typical advantages of building with new Kaiser Aluminum clapboard Siding. The clean, even lines of this revolutionary new material give this

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KAISER ALUMINUM clapboard Siding can't be weakened or disfigured by knots, splits or sawing scars. It can't rot, warp, rust or crack. And a zinc chromate prime coat applied at the mill readies it for

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CARPENTERS like to work with Kaiser Aluminum Siding, for they can use ordinary tools. To show how light this strong material is, the man at the top of the page is carrying 200 base feet! Prepare to specify Kaiser Aluminum to *your* clients! They'll want it—for no other material can match its unique *combination* of advantages. Write today for free booklet packed with information.

Kaiser Aluminum clapboard Siding Specifications:

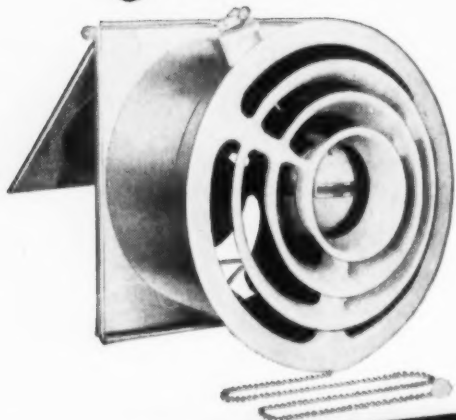
Length . . . 10, 12, 14 and 16 ft. standard lengths
Width . . . 6 $\frac{7}{8}$ " Thickness030"
Weight . . 580 lbs. per 1143 base feet (1000 sq. ft.)
Shipped in cartons containing 200 base feet., weighing 106 lbs. overall.

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**CAME THIS NEW
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• Almost every conceivable test was used in establishing N. D. M. A. Standards for toxic preservative treatment of woodwork such as doors, screens, windows. For example, treated and untreated wood samples were tested in a Louisiana swamp... subjected to long exposure and fungus attacks.

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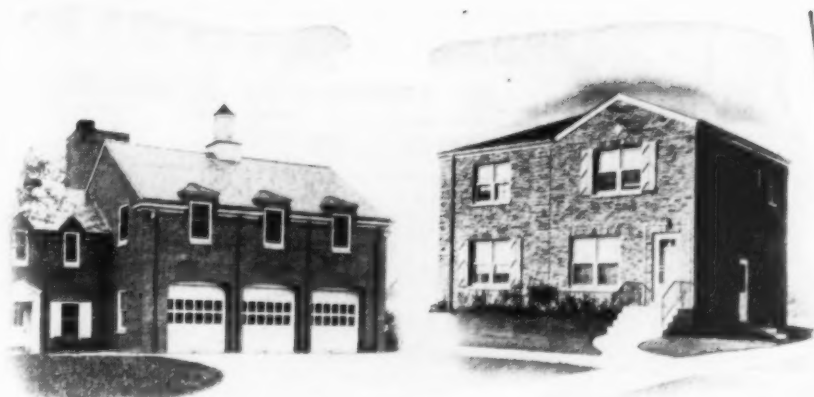
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2. Minimum standards governing the toxic preservative treating of woodwork products.
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At the high wages you pay your concrete crews today, every extra yard you pour is worth real money. You can produce 30% to 40% more yardage every day with a —

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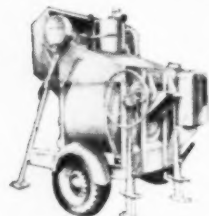
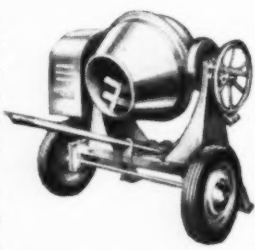


• A non-tilt half-bag mixer that keeps crews on their toes! Mixes up to 50 yards a day—fast as a power loader! While one batch mixes and discharges the next is being loaded and measured in the low-mouthed hopper. Lift the hopper gate, and in goes the new batch—*automatically shaken in*—quick as a flash and clean. Metering tank supplies water exactly. Drum turns on machined steel tracks, has famous "Dual-Mix" action for thorough mixing and extra fast discharge—a 3¾ hp engine drives it. Machine trails and moves easily and safely on wide-tracking Timken bearing wheels and springs. The fastest 3½-S mixer made—for 30% to 40% greater daily yardage!

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Fast Working End-Discharge Half-Bag Tilter

Patented V-bottom "Dual-Mix" drum gives double the mixing action of other tilters. Tows fast and stably. Spots by merely backing up to material pile, because loading end is at rear. No feet or legs on discharge end—wheelers get in and away with loads fast, no need to reverse direction. 2½ hp engine, Timken drum and wheel bearings,



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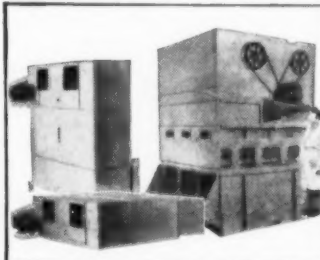
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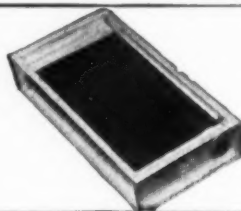


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Compact, easy to handle. Heat, cool, humidify, dehumidify, filter.

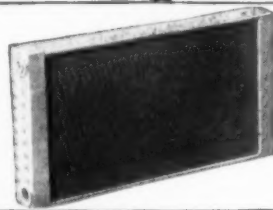
Evaporative Condensers
For condensing refrigerants of air conditioning systems.

COILS



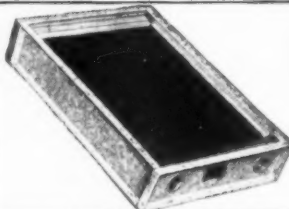
Blast Coils - Type B

Have casing for central plant heating, ventilating and air conditioning systems. Available with steam distributing tubes.



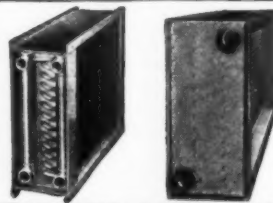
Commercial Coils—Type C

For factory-built air conditioning, heating, drying or special processing units. Made also in steam distributing tube type.



Booster Coils - Type A

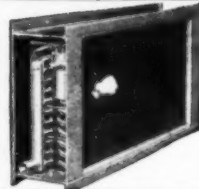
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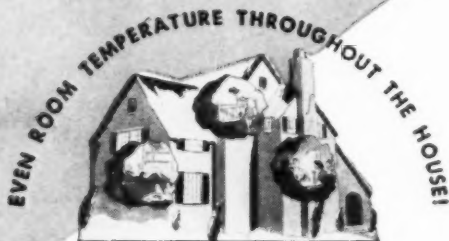
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Economy Sidings in Western Pines* include knotty pieces, milled to a variety of pleasing patterns. This "economy" lumber is a lower grade siding, but for specific purposes, gives adequate service for the least money, both in first cost and later maintenance.

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Knot sealer WP-578, developed by Western Pine Association, is recommended for priming knots to prevent paint failure. In laboratory and field tests, it has out-performed all other sealers. Prepared solutions of WP-578 are made and distributed by 42 approved paint manufacturers from coast to coast. If your dealer does not have it, write Dept. 70-B, Western Pine Association, Yeon Building, Portland 4, Oregon.

*Idaho White Pine *Sugar Pine *Ponderosa Pine

THESE ARE THE WESTERN PINES

Well-manufactured—thoroughly seasoned—carefully
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Just Line

**STAINLESS STEEL SINKS
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They give you the beauty, permanence and sanitary excellence of Stainless Steel, plus the skill and experience of Just's specialized craftsmen. Important among the differences is our

EXCLUSIVE *Radiuluxe* DESIGN

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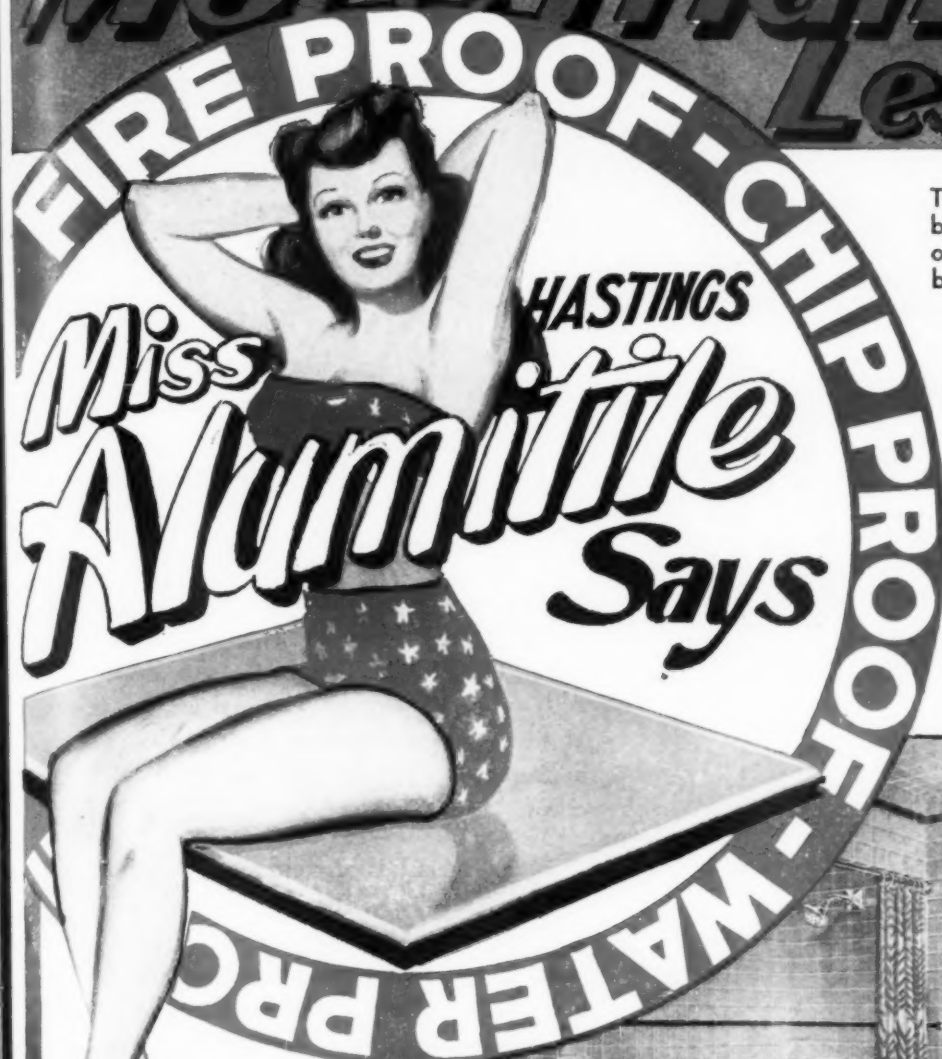
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Available in 14 rich, sparkling colors, with outside corners and wall plates for electrical outlets to match.

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MAIL THIS COUPON NOW!

Think of the new profitable market beautiful Hastings Alumitile can open up for you. Now everyone—because of the "within reach" price range — can enjoy tiled bathrooms, kitchens, and recreation rooms. And the advantages afforded by Hastings Alumitile are always certain to keep those orders coming.

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METAL TILE PRODUCTS, INC.
Hastings, Michigan

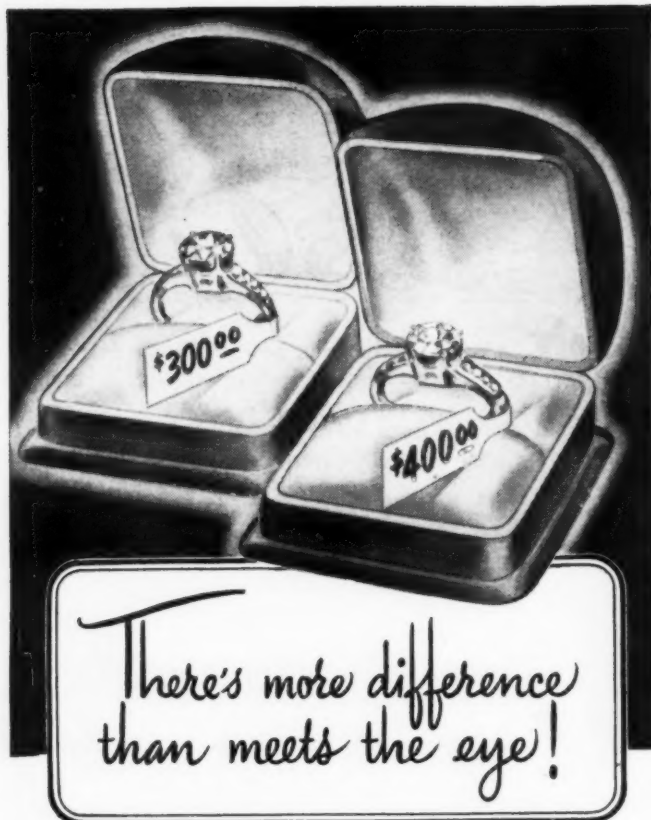
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Business.....

Address.....

City..... Zone..... State.....



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In **CHROMEDGE** Metal Trims, too

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You know you're getting genuine Chromedge quality, because these famous trims are distributed only through B & T's authorized wholesalers.

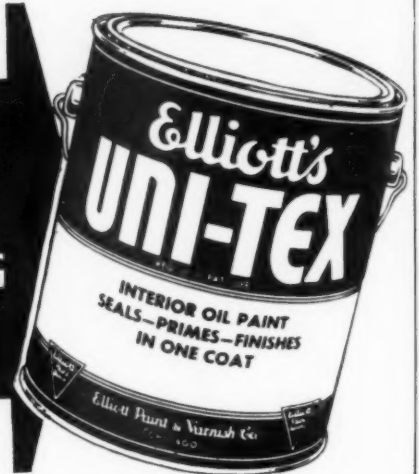
You know you'll have the right answer to every trim need, because the Chromedge line of more than 650 shapes offers a wider choice of correct trims for every application.

In many more ways, it pays to insist on genuine Chromedge every time! Write for details.



Elliott's **UNI-TEX**

CUTS
YOUR
BUILDING
COST



High interior decorating costs put the pinch on construction budgets—and profits. Elliott's UNI-TEX cuts these costs drastically by conserving gallons of paint, hours of work. Moreover, it leaves a rich-looking appearance that pleases your most particular client.

Today thousands of contractors insist on Elliott's UNI-TEX, for it is a **REAL OIL** flat paint that covers wall board, wall paper, bare plaster, and water-thinned surfaces in one coat. Because it covers more area, with less man-hours, you save paint on every job.

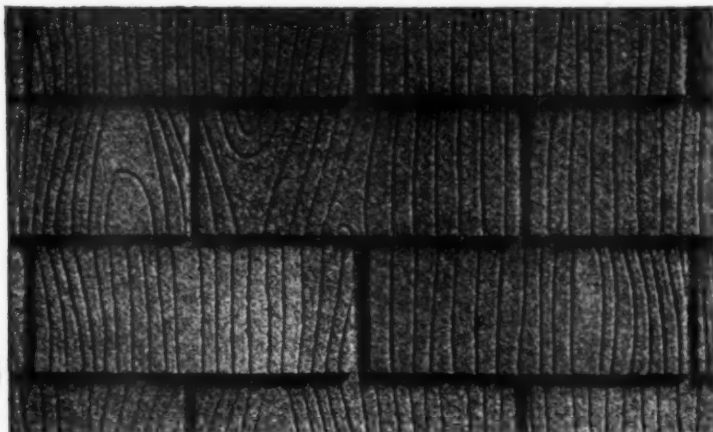
Ready to use, UNI-TEX eliminates time and effort in mixing and thinning. It requires no special skill to leave a smooth, velvet-sheen finish. UNI-TEX is manufactured in a wide range of modern colors. This specially processed paint brushes on so easily, you save hours of labor.

Try Elliott's UNI-TEX on your next job. You'll be more than satisfied with savings in costs, increased profits, and the superior finish it gives to every interior surface.

*NOT A WATER-THINNED PAINT

MANUFACTURED EXCLUSIVELY BY
Elliott Paint & Varnish Co.
4525 FIFTH AVENUE, CHICAGO 24, ILLINOIS
Also Manufacturers of Elliott's famous **WHITE-VENEER**

THEY **LOOK** GOOD



HUSKY, RUGGED APPEARANCE of Barrett Dublecote Multi-Shingles† is due to extra layer of asphalt and extra coat of mineral granules at the butts. The mineral surfacing makes possible a wide choice of beautiful blends and solid colors.

THEY **ACT** GOOD



DOUBLE-THICK BUTT construction provides extra strength at the point of greatest wear. Vital waterproofing oils are sealed in by the asphalt coating and mineral-surfacing. Result: exceptional weather resistance and years more service.

THEY **SELL** GOOD



BACKED BY NATIONAL ADVERTISING and by Barrett's 94-year reputation for quality, Barrett® Shingles are among the fastest-selling items in the home construction field today. Hard-hitting sales promotion material is available for Barrett dealers.

Dublecote
Multi-Shingles[†]
by



THE BARRETT DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N. Y.

36th & Gray's Ferry Ave.
Philadelphia 46, Pa.

2800 So. Sacramento Ave.
Chicago, Ill.

Birmingham, Alabama

* In Canada: The Barrett Company, Ltd., 5551 St. Hubert St., Montreal, P. Q.

* Reg. U. S. Pat. Off.
† Trade Mark of Allied Chemical & Dye Corp.

...THE GREATEST NAME IN ROOFING

Get This Blueprint Plan Book NOW!



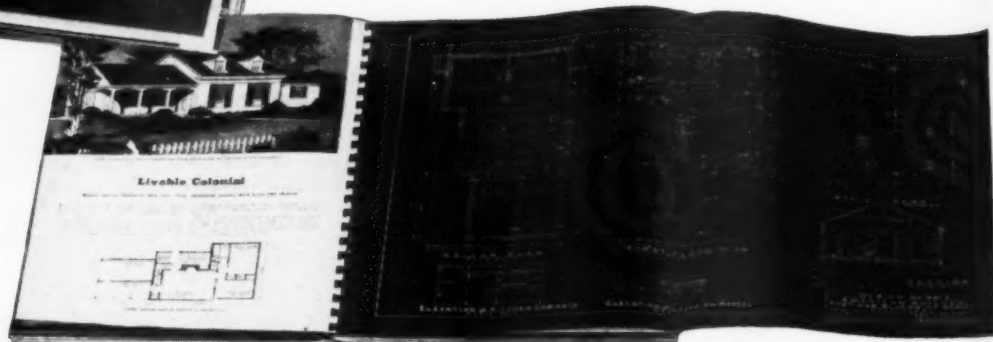
Use this new Blueprint Plan Book as a sales tool. Use it to accurately estimate building costs. Use it for ideas on Built-Ins and ideas on garage styles that will harmonize with the exterior design treatment of the house.

12 COMPLETE BLUEPRINTS

21 HOUSE DESIGNS

GARAGES — BUILT-INS

\$2.50



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AERICAN BUILDER'S New Blueprint Plan Book will be a valuable sales aid to you. The blueprints open up to 16½ inches by 11½ inches, suitable for accurately estimating construction costs of these attractive homes and garages. Colorful plastic binding permits it to open and stay flat while in use. You can help you customers visualize the house from all sides, as *all four elevations are shown*. Furthermore, the large size plans assist your customers to obtain a better idea of the relative sizes of rooms than is possible with ordinary "plan books." In addition, important details are shown and each plan is illustrated with a large, clear photograph of the house. In fact, no customer can fail to be impressed with the splendid material in this book. All homes in this book have been designed by nationally famous architects.

EASY TO INSTALL

in all types of construction

ALWINTITE

ALUMINUM WINDOWS



• **They're easier to install** because they come completely assembled—ready to anchor in place—with no extras to add, no adjustments to make.

That's *one* of many reasons builders prefer ALWINTITE aluminum windows—for all types of construction.

• **They make homes easier to sell.** That's another big reason. ALWINTITE has all these selling features: attractive appearance, sound design, built-in stainless steel weather stripping, ease of operation, freedom from painting. These are the windows home buyers are demanding.

• **They're quality tested and approved.** ALWINTITE—tested and approved by the in-

dependent Pittsburgh Testing Laboratories—carries the Aluminum Window Manufacturers Association Seal of Approval—complies with F.H.A. requirements.

• **They're available—in a complete line.** ALWINTITE double-hung windows are available in 4 styles, 12 stock sizes, with screens and storm sash to fit. Picture and basement windows, and mullions for multiple window arrangements, complete the ALWINTITE line.

See your local building materials dealer or write for literature to Department AB-6.

THE ALUMINUM WINDOW CORPORATION

A Subsidiary of General Bronze Corporation

606 Stewart Avenue

Garden City, N. Y.

ALWINTITE



TESTED AND APPROVED
by the Pittsburgh Testing Laboratory
Look for the "Seal of Approval"

DOUBLE HUNG

aluminum windows

"BUILD RIGHT WITH ALWINTITE"

This Master Salesman gives you a Profit-Making Barn Equipment Department in a floor space just 3' by 5'

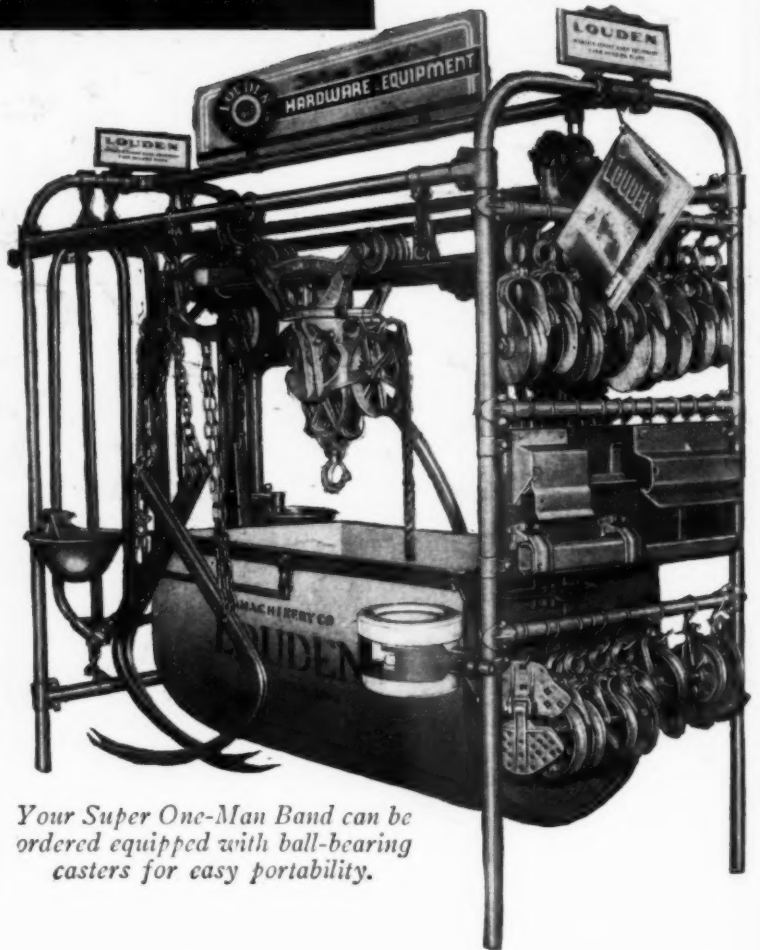
*The LOUDEN Super
One-Man Band*

Here's an outstanding sales-maker that's right in step with modern merchandising. Louden dealers have named it the "One-Man Band" — and it certainly plays pleasant and persistent tunes on your cash register.

In effect, the Louden Super One-Man Band puts a complete barn equipment department right in your store — a department that requires a floor space just 3' by 5'. (Or just 2' by 3' for the Junior One-Man Band) Yet in this compact area you show an effective assortment of pulleys, water bowls, stanchions, door tracks, litter-carrier and track, hay fork and hay carriage, salt bowl and other essential items of barn hardware.

There's another big reason for you to feature Louden One-Man Band — that's the Louden name — first name in barn equipment. Since Louden introduced the first Hay-carrier, 81 years ago, Louden has pioneered nearly every piece of major barn equipment. Louden was a pioneer in another way, too. The One-Man Band, originated by Louden, has proven to be the first practical display rack for hard-to-display barn equipment — another typical Louden "first".

Your Louden One-Man Band will help you cash in on the coming up-swing in farm building activity. And it's time to take action — so speak to your Louden salesman or Louden distributor about putting a One-Man Band at work for you . . . or write direct for complete information.



*Your Super One-Man Band can be
ordered equipped with ball-bearing
casters for easy portability.*

THE LOUDEN MACHINERY COMPANY

256 W. COURT STREET FAIRFIELD, IOWA

ALBANY 1, NEW YORK

Please Direct Inquiries to Fairfield

The LOUDEN Junior One-Man Band

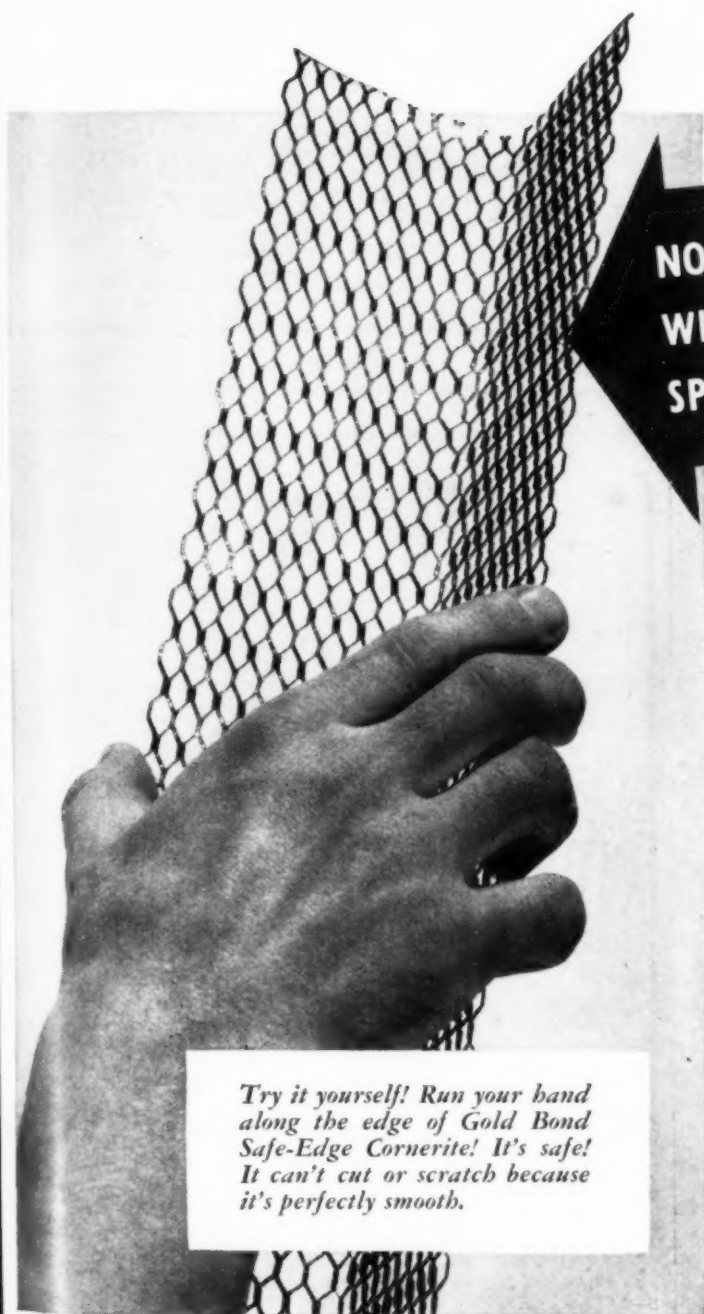
*For stores of moderate size, or where floor
area is very crowded, there's the Junior
One-Man Band — a superior sales-making
display occupying a space only 2' by 3'.*

LOUDEN

FARM BUILDING HARDWARE & EQUIPMENT

Announcing

NEW IMPROVED GOLD BOND SAFE-EDGE CORNERITE



NO ROUGH EDGES...
WILL NOT CUT HANDS...
SPEEDS BUILDING AND PLASTERING

*Try it yourself! Run your hand
along the edge of Gold Bond
Safe-Edge Cornerite! It's safe!
It can't cut or scratch because
it's perfectly smooth.*

NEW improved Gold Bond Safe-Edge Cornerite is really tops! Smooth edged and perfectly formed . . . there are *no* rough edges. Lathers like this feature because with no rough edges it's easier to handle, easier to pile, easier to pick up and apply! Plasterers like it because it will not cut hands and because there are no rough edges to interfere with troweling. It speeds the job from start to finish.

Gold Bond Safe-Edge Cornerite is *not* cut from full-sized sheets of lath like most cornerite. Specially designed and fabricated with smooth edges right at the factory. Made from copper alloy steel and painted black, there's nothing better for reinforcing internal corners! It's another new Gold Bond product, to make the lather's job easier.

NATIONAL GYPSUM COMPANY

BUFFALO 2, NEW YORK

YOU'LL BUILD OR REMODEL BETTER WITH GOLD BOND PRODUCTS

The Sensationally **NEW** Low-Priced



PARKS No. 20 20" PLANER

Here is a modernly designed, rugged, high-speed, low-priced planer that is ideally suited for every shop and industrial plant requiring a quality surfacer. The Parks No. 20 Planer has a four-knife cutterhead with a speed of 3600 R.P.M. and offers two feed speeds—20 and 40 F.P.M., and 40 and 80 F.P.M. Write for complete descriptive literature.

PROMPT DELIVERY

**THE PARKS WOODWORKING
MACHINE COMPANY**

Dept. 30-C, 1546 Knowlton Street
Cincinnati 23, Ohio

MANUFACTURERS OF QUALITY WOODWORKING MACHINES SINCE 1887



it's wonderful
she says
but no wonder
it's a

NORDAHL

IN THE WALL
SLIDING
DOOR FRAME

Dealers and builders have found that NORDAHL customers are more than satisfied—they're enthusiastic!

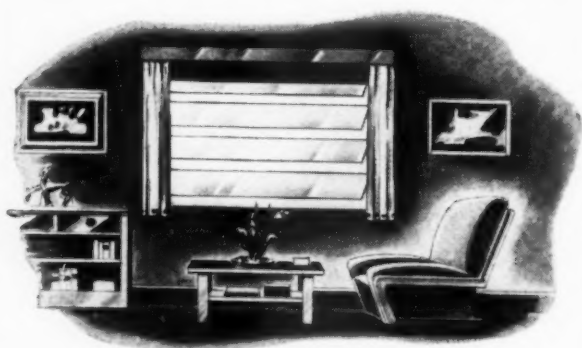
Check these NORDAHL features:

- ✓ **QUIET**—New type smooth running roller bearing phenolic fiber rollers glide silently over a metal track in the built-up header.
- ✓ **STURDY**—Exclusive metal reinforced jambs mean there's no warping or bowing—the pocket opening is held rigid and true. Nothing to go wrong, easily installed.
- ✓ **PRICED RIGHT**—Nordahl sells itself. The customer saves the modern way. No waste wall space—no waste floor space—no slamming doors.

WRITE FOR COMPLETE DESCRIPTIVE MATERIAL

NORDAHL

180 WEST ALAMEDA AVENUE • BURBANK, CALIFORNIA



ILLUSTRATED IS THE NEW *Lemco*
PANORAMIC VISUALITE AWNING WINDOW

Cat. Type 2413 (Approximate Builder's Price)

\$30.00

DELIVERED FROM STOCK

Lemco Awning Windows are manufactured from solid section aluminum extrusions. Lemco is the only experienced manufacturer of metal Awning Windows—installation everywhere. Designed for modern and futuramic homes, institutional buildings.

Write for new 1948 catalogue (Or see Sweet's)

AMERICA'S OLDEST CASEMENT WINDOW MANUFACTURER

CROFT STEEL PRODUCTS, INC.
JAMESTOWN, N. Y.



Thrush Water Circulator



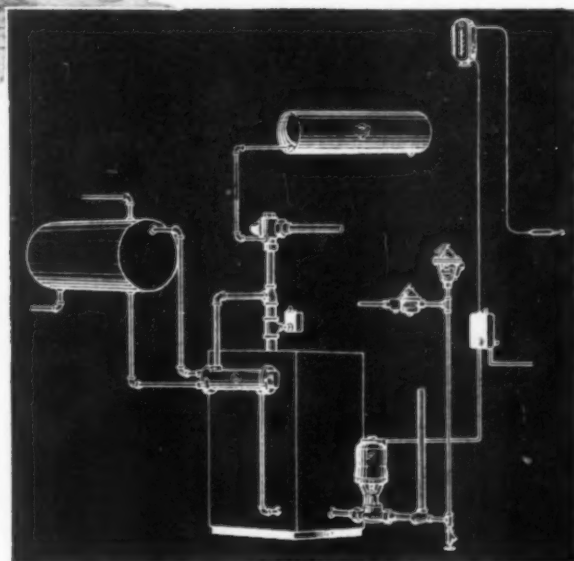
Flow Control Valve



Water Heater

REAL COMFORT

depends on
good heating
and
plentiful hot
water



forced circulating

THRUSH FLOW CONTROL SYSTEM

PROVIDES the finest automatic heating for homes, apartments and small buildings. Easily and inexpensively zoned. Assures greater home comfort with reduced fuel consumption in winter plus . . . a plentiful automatic supply of hot water for kitchen, laundry, and bath from the same boiler, winter or summer. See our completely illustrated catalog in Sweet's or address Dept. G-6 for new booklet.



H. A. THRUSH & COMPANY PERU, INDIANA

DEALERS! BUILDERS! CONTRACTORS!



**DO YOU KNOW THAT YOU CAN SELL
AND INSTALL THESE MORE SATISFACTORY,
LONGER-LASTING, BETTER-LOOKING
STEEL ACCESS DOORS AT LOWER COST
THAN THE OLD TYPE?**

Ready to Install!
Fits flush with wall and
ceiling surface.

No Special Framing!
No cutting, adjusting, or
altering, either.

Furnished Painted!
Prime coat of grey,
rust-inhibitive paint.

11 Different Sizes!
From 8 3/8" x 12 3/8" to
24 3/8" x 24 3/8"

Concealed Hinges!
— or clip fasteners.

Screw-type Lock!
Depressed level with
surface of lid.

**Every house needs at least one access
door. Public buildings need hundreds!**

**BIG, NEW
PROFIT OPPORTUNITIES
for the builder and dealer!
BIG SAVINGS for the owner!**

Make the most of
this market — with

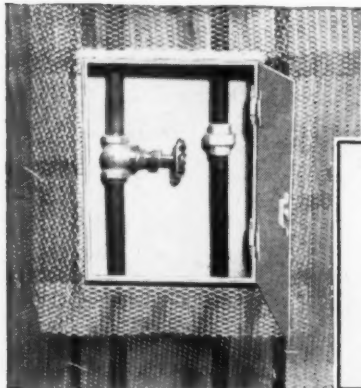
MILCOR STEEL ACCESS DOORS

(Flush with wall)

**Installed at lower cost than old-type doors
— you sell more . . . make a greater profit!**

There are three styles (11 sizes each)
of Milcor Metal Access Doors for reach-
ing key points in plumbing, heating,
electrical, and refrigeration systems—
and for permitting ceiling entry to
attics: 1. With expanded metal wing,
for plastered walls; 2. Without ex-
panded metal wing, for plastered walls;
3. For non-plastered walls: masonry,
brick, stone, wallboard, acoustical con-
struction, etc.

F-311B



Save the high labor costs. Save the time of
building special framing. Save the time of in-
stalling and painting the old-type access doors.
Make more — by selling and installing these
new, better steel doors that can't crack, shrink,
warp, or rot — and that last forever!

Customers are more satisfied, because all jobs
are perfect — because of greater interior beauty
(flush-with-wall doors are attractively papered

or painted with the rest of the wall or ceiling
surface) — and because of greater utility.

INLAND STEEL PRODUCTS COMPANY

FORMERLY MILCOR STEEL COMPANY

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Baltimore 24, Md. • Buffalo 11, N. Y. • Chicago 9, Ill.
Cincinnati 25, Ohio • Cleveland 14, Ohio • Detroit 2,
Mich. • Kansas City 8, Mo. • Los Angeles 23, Calif.
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**Mr. Dealer:
Mr. Builder:**
Tear out coupon
and mail at once
— for specifications and com-
plete descriptive material on
Milcor Steel Access Doors.

INLAND STEEL PRODUCTS CO., 4101 W. Burnham St., Milwaukee 1, Wis.

Send me specifications and descriptive
material on Milcor Steel Access Doors.

☐ I am a builder.

☐ I am a dealer.

Name.....Title.....

Company.....

Address.....

City.....(.....) State.....

THE LUSTRON HOME

What we say in our slogan

What's in a phrase?

We have tried to put our conception of the Lustron Home into a concise, meaningful combination of words. We call it

"...a new standard for living."

Of course, the idea in these words will convey different implications to different people. Here are some of the things we think three basic groups of people will read into it.

To the Buyer

Obviously, the family who buys a Lustron Home has a right to expect easier, better living.

More house for the money—more than 1000 square feet of usable, livable floor space. More utilities included in the basic purchase—kitchen cabinets, combination dishwasher-clotheswasher, exhaust fan, automatic water heater, automatic heating plant.

Twice the storage space of a comparable conventional house in Lustron's built-in "closet walls." Built-in features and radiant panel heating system unobtainable in any other house at any price. No repainting, redecorating or reroofing ever needed in this porcelain enameled steel home. The only cleaning materials are soap, water, and a damp cloth.

To the Builder-Dealer

Lustron's plan of working through soundly financed builder-dealers in established communities means that construction costs can be stabilized and accurately controlled. There can be no unforeseen construction delays, no need for substitution of materials.

Lustron's builder-dealers put their time against construction and sales. They waste no time on procurement, in vain searches for scarce materials. They erect a complete Lustron Home in approximately three days after completion of the concrete foundation, and get on to the next job—giving the



Permanent, easy to maintain, extremely little depreciation—these advantages are basic in the low-cost Lustron Home. Porcelain enameled steel panels can never decay, fade, weather or stain.

building industry the quick turnover it has needed for so long.

To the Lending Institution

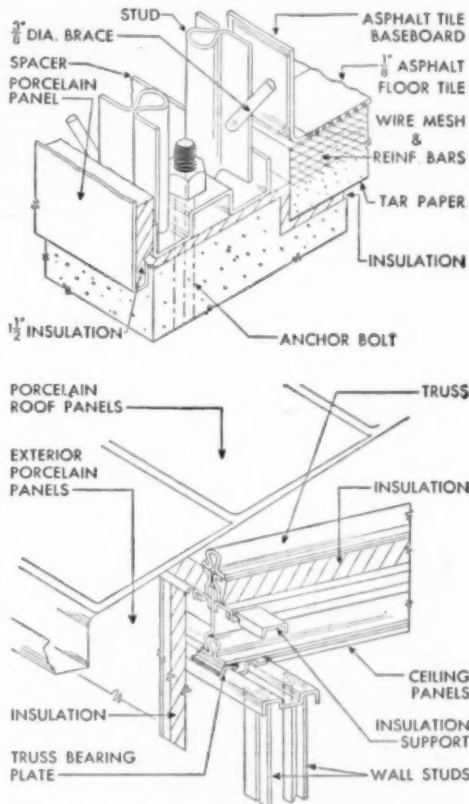
Banks, savings and loan associations, mortgage houses, and government agencies will find a new standard of value in home construction in Lustron's "new standard for living."

The great strength of all-steel construction plus the lasting qualities and easy maintenance of porcelain enameled steel means permanence, low rate of depreciation, higher resale value over a longer time.

Low carrying charges (well within the reach of modest incomes) cover not only a substantial house but also a "package" house, in which all utilities, built-in storage units and combination dishwasher-clotheswasher are included on one mortgage. The buyers' funds are not spread over separate installment payments on a great number of items.

Lustron Homes are now on exhibition in a number of cities.

Deliveries to builder-dealers will start in late June or July. We invite you to inspect the Lustron Home — and for more details, write us. © L.C.



Detail drawings show soundness of Lustron construction methods.

LUSTRON CORPORATION

4200 East Fifth Avenue

Columbus 16, Ohio



HOMASOTE gets a letter

Long Branch, New Jersey
October 22, 1947.

President
Homasote Company
Fernwood Road
Trenton, New Jersey
Dear Sir: —

I am one of 56 men who constructed and then lived in the Byrd Expedition buildings (at Little America, Antarctica for over a year in 1934-35) which were assembled from Homasote lined sections left over from the establishment of the first Little America in 1929. These sections were already the veterans of five years' storage in damp New Zealand warehouses, but were still so strong and easy to saw, fit, and assemble that we were considerably surprised. But when we had dug down to the old camp and found also that the Homasote in the original buildings was in perfect condition after one year of soaking in melted snow (1929-30) and five years under the terrific pressure of 20 feet of ice, we were completely sold. When other wallboards would have pulped, cracked or dissolved, Homasote remained firm and trustworthy insulation against blizzards and temperatures to minus 75!

I am not in the habit of using my few leisure hours to throw bouquets, I have too much to do, but I feel that merit deserves reward, so here goes — believe it or not, the above remarks are paled into obscurity by my present opinion of your fine product. When, as a technical observer, on the recently concluded Navy "Operation Highjump", I was one of the few who were privileged to dig down 12 feet to our old home 10 miles from the newest camp-site. I found the 18 year old Homasote in the walls and ceilings of the "Messhall" and "Science Lab" (the only buildings we could reach) absolutely unharmed by time, water, or cold. Hundreds of tons of ice had forced up the wood floors and pushed down the ceilings until they met in the center of the rooms, and puddles of ice everywhere evidenced the repeated freezing and thawing of the many seasons, but the walls were straight, unbuckled and scarcely stained.

Later, when our Expedition was leaving for its return to the States (February, 1947) and I had occasion to make one last run to the old camp to mark the entrances against the future, I hacked out a piece of the messhall wall to send to you for analysis. I am mailing it to you for whatever purpose you may wish to use it, and if you ever want me to convince some doubting customer of yours, just lead me to him. At least I can assure you that when at last I build the home I've been planning throughout several years of roaming the world, the insulation will emphatically be Homasote.

Yours sincerely,

Amory H. Waite, Jr.

Amory H. Waite, Jr.
Radio Engineer
BAE II 1934-35 and 1946-47

P.S. I forgot one item. When I was carrying your specimen up the rope ladder from the whaleboat to the ship, it fell out of my pack and drifted away to sea. To my amazement its generation-old water-proofing qualities were still intact for it kept floating! Another boat speared it with a boat hook an hour later and returned it to me, punctured, but still definitely useable wallboard. The hole, therefore, is a badge of honor rather than a defect.

AHW



HOMASOTE COMPANY, Trenton 3, N. J.

Structural Reinforcing or other Blding Steel Shipped from Stock

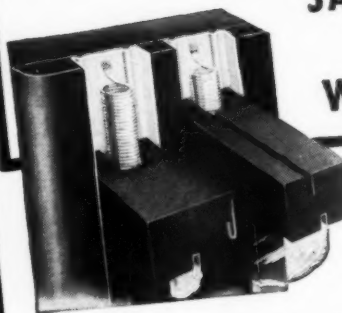
Write for Stock List—
your guide to over 10,000
different kinds, shapes
and sizes of steel for
quick shipment from ten
plants.

Joseph T. Ryerson & Son, Inc., Plants at: New York, Boston, Philadelphia, Detroit, Cincinnati, Cleveland, Pittsburgh, Buffalo, Chicago, Milwaukee, St. Louis, Los Angeles.

RYERSON

The Milwaukee Combination

SASH BALANCE and WEATHERSTRIP

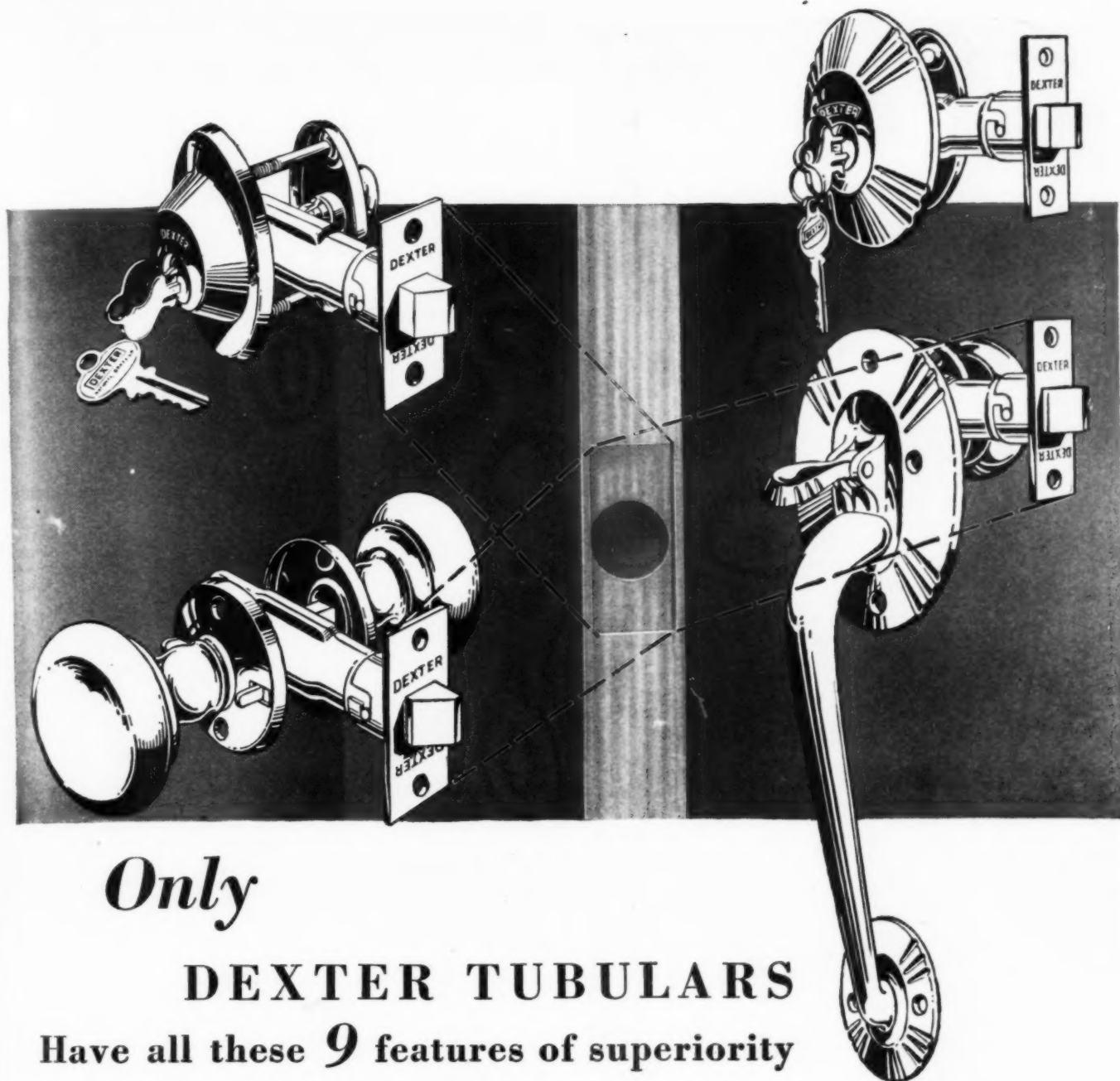


- ★ EFFICIENT
- ★ LOW COST
- ★ FOR OLD OR NEW BUILDING

Finger-tip control!...
With an accurately balanced sash that will not "creep"! An efficient seal against drafts, dust, moisture! No wood-to-wood contact... prevents sticking windows! Smooth, positive action. Just 4 spring, bronze channels and 4 springs!

Simple installation slashes labor costs! No high-priced, special skill needed! One man can easily install 25 or more windows in 8 hours!

Write Dept. A-4 for Free Folder and Price List
Milwaukee STRIP SERVICE, Inc.
4621-23 W. LISBON AVE. ♦ MILWAUKEE 8, WISCONSIN



Only

DEXTER TUBULARS

Have all these **9** features of superiority

DEXTERS, all fit the same size hole. Latches, locks, entrance sets—install in just one standard, uniform boring. That's what makes the Dexter Bit Guide so worthwhile. It can be used to save time during installation of every Dexter lock.

This is another Dexter feature appreciated by every builder — another reason why Dexter Tubulars install faster at less expense — another one of the 9 special reasons why Dexter Tubulars are first choice with builders.

- 1** Stay-life Set Screw
- 2** Two Big Coil Springs
- 3** All Steel Interior
- 4** Solid Brass Trim
- 5** Uniform Boring for Locks and Latches
- 6** Self-Adjusting Alignment
- 7** 25 Years Specialized Experience
- 8** Shallow Face Plate Mortise
- 9** Lifetime Guarantee

NATIONAL BRASS COMPANY

Grand Rapids, Michigan

MAKERS OF BUILDERS, CABINET, SCREEN DOOR
AND SHELF HARDWARE



Thoro System

Contractors and Builders

Most every basement develops a water problem at one time or another.

It is good business to offer security to the homeowner by waterproofing the basement while it is new and before water has been attracted to it.



WATERPLUG, a quick-set hydraulic compound, seals streams of active water and seepage from entering through wall. Set begins in from 3 to 5 minutes after mixing water is added.



THOROSEAL, a slow-set hydraulic compound, gives the applicator 3 to 4 hours, before set begins, to brush THOROSEAL into the masonry surface. (Scrubbing not necessary, as THOROSEAL is prepared especially to flow easily and quickly into every crack, void and defect in the surface, where it becomes structurally stronger than the surface to which applied.)

WRITE NOW

for circulars descriptive, in photographic detail, of how to waterproof a basement, how to protect the exterior surfaces of manufactured block, brick, concrete or any type masonry THOROSEAL

THE
Thoro
SYSTEM

Standard Dry Wall Products, Inc.
Box X - - New Eagle, Pennsylvania

Protects the Earth's Masonry

WATERPLUG THOROSEAL QUICKSEAL

DUNTILE

*World's Most
Beautiful Roof*

**Can be Your
Outstanding**

Manufacturing Opportunity

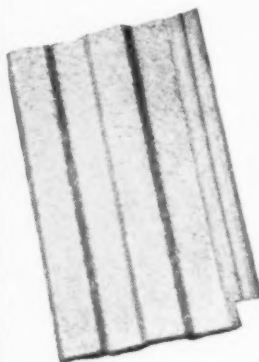
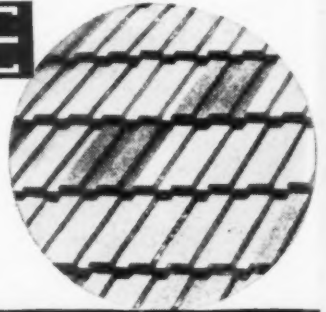
You can earn big money in the Duntile business—100% to 150% mark-up on basic costs. You can manufacture for a selective market—uncrowded and minus price-competition—because Duntile is exclusive and much-wanted.

Duntile is the world's most beautiful roof. With all the safety, endurance and economy of masonry at its best. Wide range of smart, fused-on colors. French or Spanish type. Truly the roof that every owner wants.

Swing into Duntile production NOW. You may already have some equipment that can be utilized. Manufacturing is easy, interesting, profitable. We supply all machinery necessary. Instruct you fully. Back you with aggressive cooperation. Write for *Manufacturing Analysis* which gives cost and profit data, etc.

W. E. DUNN MFG. CO.

430 W. 23rd Street
Holland, Mich.



WOODLIFE TOXIC WATER REPELLENT TREATING



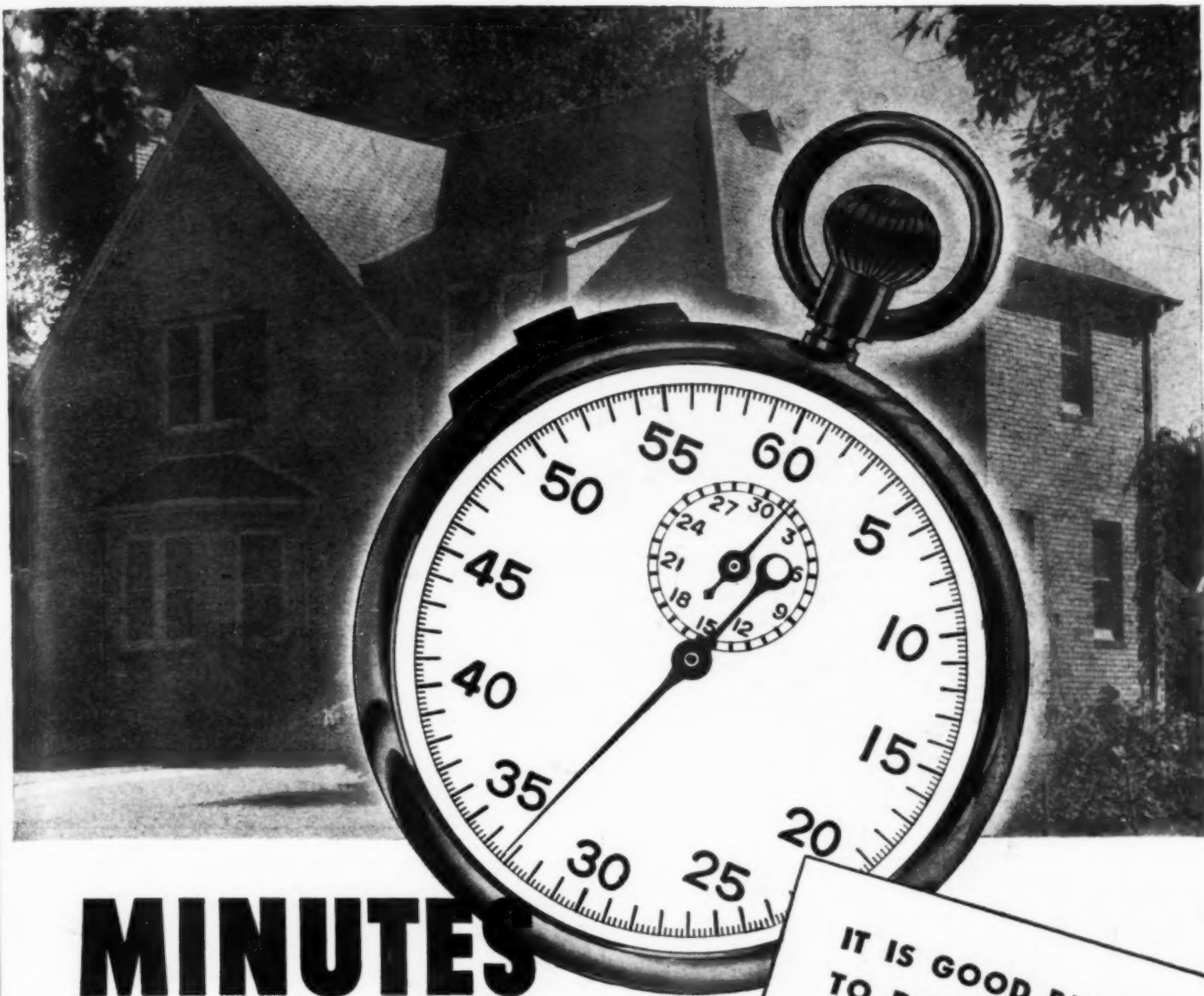
SIDING That Satisfies

Real protection against splitting, checking and warping is yours with WOODLIFE. No complaints about blue stain or rot. An unblemished paint surface free of blisters, cracks and discoloration.

Write for literature and name of nearest Dealer!

Protection Products Mfg. Co.

Mfrs. of CHEMICAL PRESERVATIVES Since 1921
Research Laboratory and Plant KALAMAZOO, MICH.



MINUTES

can buy what dollars can't!

Money can't buy you a good reputation. But minutes can! A few extra minutes on the job... to make the roof lay tighter, or smoother... to make the ridge line cleaner... to leave the yard and premises neater... can earn you and your firm a fund of good will you could not accumulate in any other way.

It is what these extra minutes stand for that you really have to offer... skill, know-how and good thorough workmanship. Sell and deliver that skill and that thoroughness. And match your good workmanship with good materials. Asphalt Shingles are today's biggest dollar's worth in the construction field. Urge customers to choose the pattern, weight and color that give best coverage, best appearance. Sell quality... sell value.

IT IS GOOD BUSINESS TO DO IT BETTER!

When it comes to applying Asphalt Shingles there are certain practical steps and precautions that will help assure you a good application. For example, six nails are recommended in applying strip shingles because their use makes a better roof... helps eliminate comebacks for the applicator.

Estimate the wind hazard, for the whole roof and for areas of severest exposure. Plan to make your application wind-resistant with extra nailing... and by cementing tabs.

Remember always, good workmanship is good business. And there's profit in the minutes that make the job better.

Roof with
✓ **COLORFUL**
✓ **SERVICEABLE**
✓ **FIRE RESISTANT**

ASPHALT SHINGLES

ASPHALT ROOFING INDUSTRY BUREAU • ROOM 1703 • 2 W. 45TH ST. • NEW YORK 19, N. Y.
SPONSORED BY 28 LEADING MANUFACTURERS OF ASPHALT SHINGLES • ROLL ROOFINGS • SIDINGS • AND BUILT-UP ROOFINGS

Health and Comfort under Fingertip Control

NO OUTSIDE CURRENT IS REQUIRED.
General Controls' B-60 Room Temperature Control
Systems for all gas-fired appliances are fuel savers
—silent—safe and fully automatic.



Avoid "over or underheating" conditions. The automatic METROTHERM (Thermostat) provides "EVEN" temperature which is so vital to the health and comfort of your family.

Relax in comfort—with the assurance that your METROTHERM is automatically providing continuous temperature around the clock.



Fingertip Control—simply set dial to desired temperature and the METROTHERM automatically responds for constant, healthful heat supply. (Timer Thermostats available soon.)

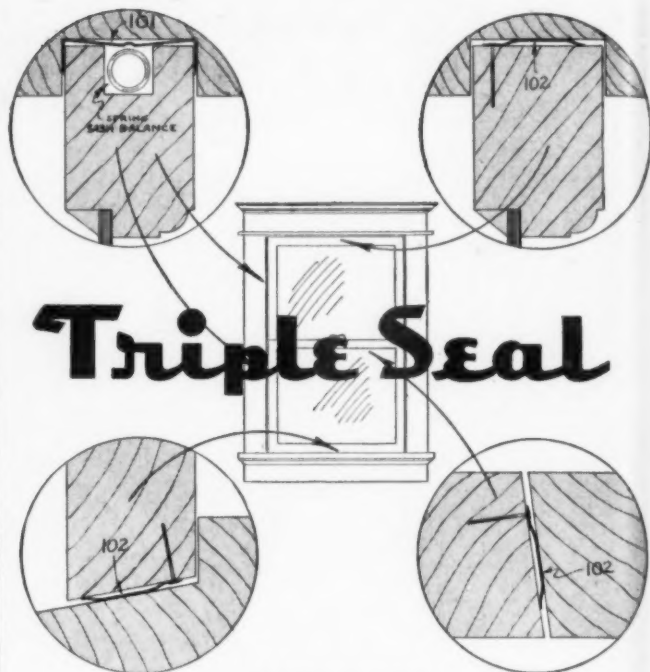


Automatically Yours For Better Heating

GENERAL CONTROLS
GLENDALE 1 CALIFORNIA

Write For Free Descriptive Literature

FACTORY BRANCHES: BIRMINGHAM (3) BOSTON (16) CHICAGO (5)
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SAN FRANCISCO (7) SEATTLE (1) **DISTRIBUTORS IN PRINCIPAL CITIES**



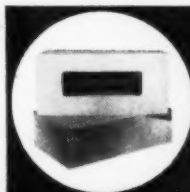
Triple Seal

COMBINATION SASH BALANCES BRONZE WEATHERSTRIPS

Unit **PACKAGED**, any size opening **\$3.25**

See your lumber dealer or order direct from us.

THE WEATHERPROOF PRODUCTS CORP.
321 WESTPORT ROAD • KANSAS CITY 2, MO. • WESTPORT 1210



Be the Local Manufacturer of this Modern Building Unit

The business is timely. The products are America's smartest and most beautiful masonry building units. The market is as big and wide open as the huge building industry. Potential earnings are the greatest offered by any masonry product.

Such a combination forms the outstanding manufacturing opportunity in the building field. It offers men like you the chance to establish a life time business within a basic industry.

Colorful Beauty . . . Modern Design

Dunbrik-Dunstone gears with today's demand for low-cost masonry with the utmost in eye-appeal. With strength a-plenty and impregnated water-resistant values. Made in local plants, from local materials with local labor, and at production costs that provide **HIGH EARNINGS**—even after effecting tremendous savings to building owners.

New territories are now being opened to men of vision and aggressiveness. Write or wire us for reservation covering your territory, and descriptive literature.

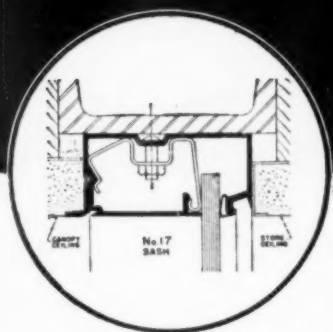
W. E. DUNN MFG. CO.
450 W. 24th St., Holland, Mich.



DUNBRIK

Another new sash

IN PITTCO DE LUXE STORE FRONT METAL



QUICK, EASY SETTING is an important feature of this flush type sash, Pittco De Luxe No. 17. It was designed primarily for use where the owner wishes to have the ceilings of canopy and store on the same plane, apparently joining each other without interruption. It can also be used at the sides of the glass, and with other members of either De Luxe or Premier lines of Pittco Store Front Metal. Of special importance is the fact that this new sash is self-adjusting to allow for a certain amount of deflection in beam or canopy . . . there are no obstructions between the edge of the glass and the inner member.

Choose Pittco for your store modernization work. Both Pittco lines may be set from outside, and the speed and simplicity of setting procedures reduce installation time and save money. At the nearest "Pittsburgh" warehouse, there are qualified technicians who will advise you on the erection of rough work to receive "Pittsburgh" products properly. And experienced crews of "Pittsburgh" workmen set metal and glass quickly and skillfully.

Extensive, sustained advertising has made "Pittsburgh" well known to your customers as the leader in store modernization work. That's another reason why it will pay you . . . in satisfied customers as well as profits . . . to use "Pittsburgh" Glass and Pittco Store Front Metal.

PITTCO

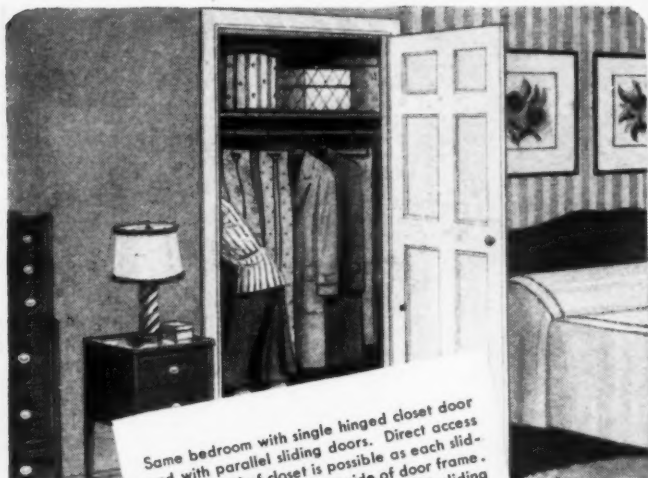
STORE FRONT METAL



PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

For more "Living" room



Same bedroom with single hinged closet door and with parallel sliding doors. Direct access to either half of closet is possible as each sliding door opens to opposite side of door frame. Note added floor space available with sliding doors.



USE VANISHING DOORS

Whether the job calls for tiny kitchenette apartments or a palatial mansion, there's no getting around one fact—hinged doors waste space! That is why more and more residential building plans specify vanishing doors.

With vanishing doors, sliding from side to side, there's no interference with the location of furniture, lighting fixtures, pictures, rugs—nothing in the room gets "behind the door." Used for closets and wardrobes, they permit direct access without fuss or bother.

Specify R-W Vanishing Door Equipment

For smooth, silent, trouble-free operation, specify vanishing doors installed with Richards-Wilcox No. 719 Vanishing Door Hanger and Wood-Lined Steel Track. No oiling required . . . hanger wheel has Oilite self-lubricating bearing, rolls on self-centering wood track lining without metal-to-metal contact.

For Use In 2" x 4" Studded Walls

Richards-Wilcox No. 719 Vanishing Door Hangers and Wood-Lined Steel Track are designed for use in 2" x 4" studded walls. This outstanding feature is made possible by the R-W engineered "Ordinary Wall" pocket.

For complete details—or free consultation without obligation—contact nearest Richards-Wilcox office.



1880-1948
OVER
68 YEARS

Richards-Wilcox Mfg. Co.

"A HANGER FOR ANY DOOR THAT SLIDES"
AURORA, ILLINOIS, U.S.A.

Branches: New York Chicago Boston Philadelphia Cleveland Cincinnati Washington, D.C.
Los Angeles San Francisco New Orleans New Mexico Dallas Houston Kansas City
San Antonio San Diego St. Louis

Easy-Lift SASH BALANCES





**No Finer
Sash Balances
Made—
Regardless
of Price!**

**NOTED
for Uniform
Tension and
Smooth Operation**

**Also Made In Side Type
and Turned Down Lip**

Straight lip, overhead type for installation in head jambs. Single or double installation. Rust resistant metal.

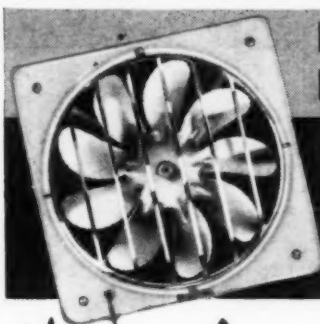
Manufactured In the Following Weights:

 $4\frac{1}{2}$ - 6 - 8
10 - 12 - 14 - 16 lbs. 

**Circular
on Request**

Prompt Delivery

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1600 E. 10-Mile Road Hazel Park, Michigan



DEMANDED EQUIPMENT

IN THE MODERN HOME

Ventilating fans are a must in today's new home—women demand them. Wise builders compare, then furnish—

Ventrola VENTILATING FANS

Smart styling, sparkling chrome grille and gleaming white porcelain-type enameled front give VENTROLA FANS a "Woman appeal" second to none. Grille and blade removable for easier cleaning—minimum operating cost—fully enclosed, noiseless, static-free motor with the power to move the maximum amount of air (over 800 C.F.M.) are features that increase their desirability. Units are easy to install—low in cost—Underwriter's Laboratory approved.

QUICK TO INSTALL—FIT ANY WALL



Adjustable expanding sleeve makes possible quick installation in brick or masonry walls.

Sleeve contracts for installation in frames or narrow walls. Plug-in motor connection and electric outlet box are part of sleeve.



Write for prices and name of nearest distributor.

FAST DELIVERY
Volume production assures fast delivery from stock. There's no waiting.

Ventrola
Designed and
manufactured by
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4414-18 W. VERNOR • DETROIT 9, MICH.

6 common conditions where ***WOLMANIZED** PRESSURE TREATED LUMBER protects against DECAY and TERMITES



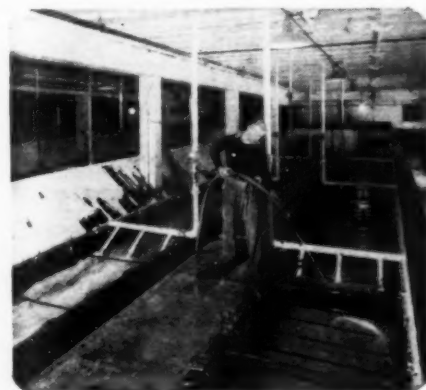
1. Wherever moisture is condensed because of concrete or masonry.



2. Ground moisture and rain held in joints, etc., of outdoor structures.



3. Wood used in or near the ground open to attack by termites.



4. Where steam and vapor from industrial processes are prevalent.



5. Walls, floors, ceilings subject to condensation from refrigeration.



6. Stock barns, silos and other farm structures subject to high humidity.

ITS LONG LIFE MAKES LASTING CUSTOMERS

Industrial work is steady and profitable. It is even more so when you are able to deliver a value in lumber, such as resistance to wood-decay and termites.

When you recommend "Wolmanized" pressure-treated lumber, you can point out that the extra cost of this lumber is less than the cost of replacement labor alone. And you can also point out—with actual service records to back you up—that Wolman-

ized lumber lasts 3 to 5 times as long as ordinary wood.

Customers are quick to see the advantage of economy like this. The long life of the Wolmanized lumber you put into a job will make lasting friends.

For full information and service records on Wolmanized pressure-treated lumber, see your local dealers or write to American Lumber & Treating Company.

The latest information on WOLMANIZED Pressure-Treated Lumber

A new booklet which tells the complete story of Wolmanized Lumber is yours for the asking—write for your copy today.



*Registered Trade Mark

AMERICAN LUMBER & TREATING COMPANY

General Offices: 332 South Michigan Ave., Chicago 4, Illinois

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141 Milk Street

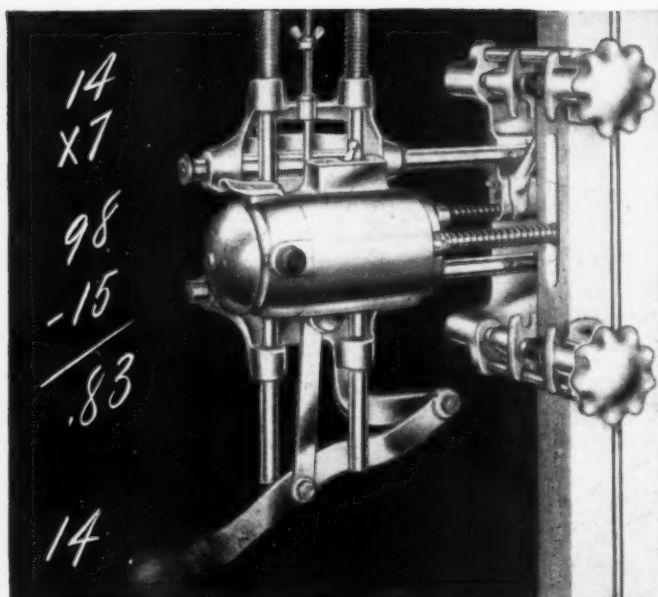
New York 17
420 Lexington Ave.

Washington 5
831 Southern Bldg.

Jacksonville 2, Fla.
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Can you afford **NOT** to have a **STANLEY-CARTER LOCK MORTISER?**

● If you mortised 75 doors last year, a Stanley-Carter Lock Mortiser would have paid for itself and from now on, for years to come, would put money in your pocket everytime it cuts another mortise.

EASY TO USE — Weighs just 26½ lbs. — sets up on the job and operates from any light socket. After 10 minutes instruction, any carpenter can turn out neat, clean mortises in 30 seconds flat. Depth and length of the mortise are controlled by two simple adjustments while width of the cut is governed by the size of the cutter used. Two self-centering clamps insure that every mortise will be in the center of the door regardless of thickness. After the first mortise is cut, height rods can be inserted to insure that all succeeding doors have the mortise properly located.

WRITE TODAY for full information about Carter Door Sets. Perhaps you'd like to have a Stanley-Carter power tool expert call on you and examine your whole setup with you. Maybe you'll see ways to cut costs right down the line. Stanley Electric Tools, Stanley-Carter Sales Dept., 534 Myrtle St., New Britain, Conn.

STANLEY

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HARDWARE · HAND TOOLS · ELECTRIC TOOLS

Goldblatt

LONG HANDLE CEMENTERS' and PAVERS' TROWELS

Highest grade spring steel blade.



Steel-mounted ash handle 7 feet long.

Size 18 x 5 inches, Price each.....	\$ 8.00
Size 24 x 5 inches, Price each.....	9.00
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GOLDBLATT PLASTERING TROWELS

No. 2S
each
\$3.35

Correctly tempered flexible steel, pre-war quality blade. 10½ or 11 inch lengths.

CEMENT FINISHERS' TROWELS

12-in. @ \$3.35; 14-in. @ \$3.60; 16-in. @ \$3.85;
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All prices F.O.B. Kansas City, Mo.

A complete line of Cementers' Sidewalk Edgers, Curb Tools, Sidewalk or Pavers' Groovers.

GOLDBLATT TOOL CO.

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TROWEL



BRAND

TRADE MARK REGISTERED
Top Quality, Best Known Masons Tools of All Kinds for Over 60 Years.
Send Check With Order. Catalog FREE!

AVAILABLE IMMEDIATELY FLUSH PANEL STEEL DOOR and FRAME UNITS

DOORS— Precision built, hollow steel, flush panel type. Sound and fire resistant, permanent—no warp, no sag, no swelling or sticking. Mortised for standard hardware. Prime Painted.

FRAMES— Roll-formed, all welded, one piece construction. Highest quality zinc coated Galvanite steel. No rust or expensive cleaning prior to painting. Hinges welded in place. Brass Strike Plate.

SAVE MONEY

American metal Door and Frame Units cut total door cost per opening. Economy of such precision fitted standard doors and frames has been demonstrated during past year on several of the largest housing projects in the country.

• Write for Quotations •

AMERICAN STEEL DOOR COMPANY
8825 GRINNELL AVENUE, DETROIT 13, MICHIGAN

Not only Bendix washers but Bendix dryers

too . . . are part of these new Gross homes!*

Why?

"Look-Ahead Builder" John C. Gross tells you two unbeatable reasons why he installs Bendix equipment in Gross Homes.

"Better looking . . . and better living!"

Installing a Bendix automatic Washer, and a Bendix automatic Dryer, says Mr. Gross, increases the value of the property . . . makes it more completely equipped for modern living. And elimination of unsightly clothes-poles and clotheslines from back yards increases the beauty of house and grounds.

It's not by accident that America's blue-chip builders, like Mr. Gross, and many others, make Bendix equipment a part of every blue-print. These smart builders know that a home planned for easier living is a home that the housewife wants. Also, Bendix Washers and Dryers can be sold on a package-mortgage basis — costing just a few additional cents a month — so it's a bargain in the woman's eyes, as well as a boon!

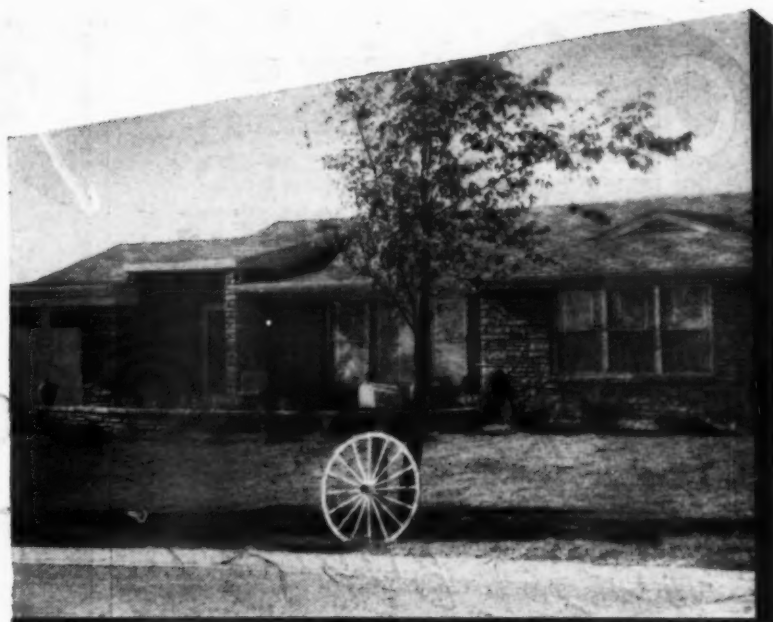
So take a tip from the men who display the "Sign of a Look-Ahead Builder" on their developments! A reputation for giving more for the housing dollar today, will help keep you building and selling houses tomorrow — when the housing boom is over!



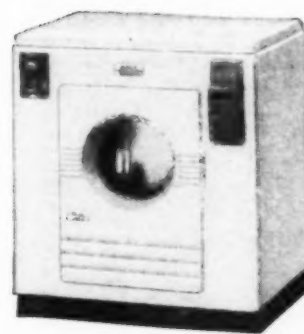
DISPLAY THE SIGN OF A "LOOK-AHEAD BUILDER"!

*Gross Homes Development in St. Louis, Mo. All homes completely equipped, including Bendix automatic Washers and Bendix automatic Dryers. Prices range from \$19,500 for 5 rooms (1450 sq. ft.) to \$23,000 for 6 rooms (1790 sq. ft.)

YOUR CUSTOMERS LIVE BETTER WITH BENDIX!



The all new Bendix Washer—can even put in its own soap! Compact, efficient, counter-height for easy convenience. DeLuxe model shown. (Automatic soap injector optional).



The matchless Bendix Dryer—beats the weather to a frazzle, saves work, saves time, a boon to your women prospects. Plan for this Bendix duet!

BENDIX^{automatic} Home Laundry

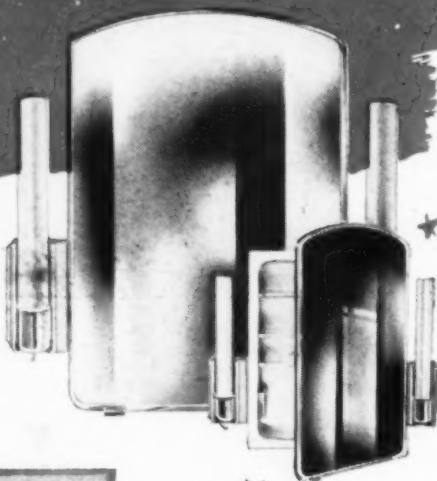
BENDIX HOME APPLIANCES, INC. • SOUTH BEND 24, INDIANA



★ new and
better
**LIGHTED
CABINETS**

**SEAMLESS
DEEP DRAWN
STEEL BODIES**

MODEL LSF-264 offers a top value in sales appeal with its big 16" x 24" stainless framed plate glass mirror—graceful lighting—extra features.



ADEQUATE LIGHT for the entire bathroom. No extra fixtures to buy. All Grote lighted cabinets are wired at the factory.

BLADE DISPOSAL BOX—removable plastic container—as handy as a bathroom cabinet. Men will go for this feature.

ADJUSTABLE SHELF BRACKETS—recessed for space saving. An extra dividend of convenience for your most particular client.

BULB EDGE GLASS SHELVES for added beauty and added protection to those sparkling crystal glass shelves.

SEAMLESS ROUND CORNERS—a quick wipe with a damp cloth and they are spotlessly clean—a boon to busy housewives.

★ **GROTE**—always first with the finest—rings the bell again with the first full line of Seamless Drawn Cabinets. These beautiful NEW, eye-catching deep drawn steel cabinets bring satisfied customers—enthusiastic reorders—more profits for your cash register.

GET BETTER PRICES
GET BETTER PROFITS
GET THE GROTE LINE

Send for Catalogue of
Grote Bathroom Cabinets.

**The GROTE
MANUFACTURING CO., INC.**
BELLEVUE, KENTUCKY

for Easier Installation

for Longer Life!



SPECIFY

Hidalift

THE 100% CONCEALED SASH BALANCE

Plough the sash, attach two screws and Hida-lift is installed... as easy as that! The self centering guide bushing maintains perfect balance, prevents jamming and eliminates the need for templates in installation. The tension spring is sealed inside the tubing to prevent wear caused by dust. Home owners appreciate the trim architectural lines made possible by the elimination of bulky, drafty sash weight boxes...approve Hida-lifts "100% Concealed" feature.

WRITE for completely descriptive literature which includes installation details and lists sizes and specifications to fit all standard sash.

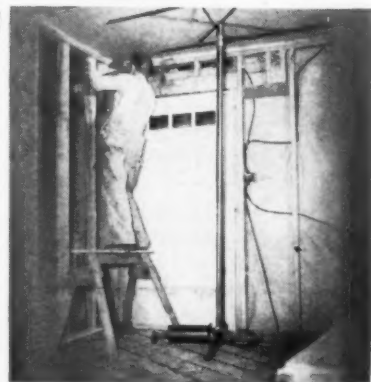
THE TURNER & SEYMOUR MFG. CO.
TORRINGTON, CONN.



**Double CEILING SPEED
... with ONE LESS MAN**

Approved by...
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BUILDERS
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**Jackflat
PNEUMATIC
LIFT**



Cuts Installation Time in 1/2

Furnished
150 lbs. Lift Force
from 5' to 9' 8"

Now, two men can hang TWICE as much ceiling material as three men doing the job the old fashioned way. The Jackflat Lift is speeding ceiling work and profits for users everywhere... it lifts... it holds! Lightweight; rolls anywhere. Simple to use. Knocks down in 3 minutes; compact enough to carry in any car. Pays for itself in one week... guaranteed for one year.

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This Symbol

is your guide to woodwork, finish and mouldings of quality you can depend on to protect your workmanship. Arkansas Soft Pine Satin-like Interior Trim facilitates installation with extra soft texture for easy working, and tough fiber that nails without splitting. Satin-like to the eye and touch, it is free from pitch, absorbing priming coats uniformly to become integral with the wood fiber. Finishing coats of enamel, paint, or stain retain their smooth surface, tone and shade for years, free from raised grain or discoloration.

Where To Get It

Trademarked Arkansas Soft Pine is produced exclusively by big, modern mills. It is well manufactured to standard sizes, scientifically kiln dried and seasoned to specified moisture content. Available to you at local lumber dealers and planing mills east of the Rockies. For complete information, data and how to specify, write for your copy of this useful handbook.



Send for
Your
FREE COPY

Arkansas Soft Pine Satin-like Interior Trim is produced in standard lineal and packaged sets.

ARKANSAS SOFT PINE BUREAU . . . 648 Boyle Building
Little Rock, Arkansas

Cut Scaffolding Costs...

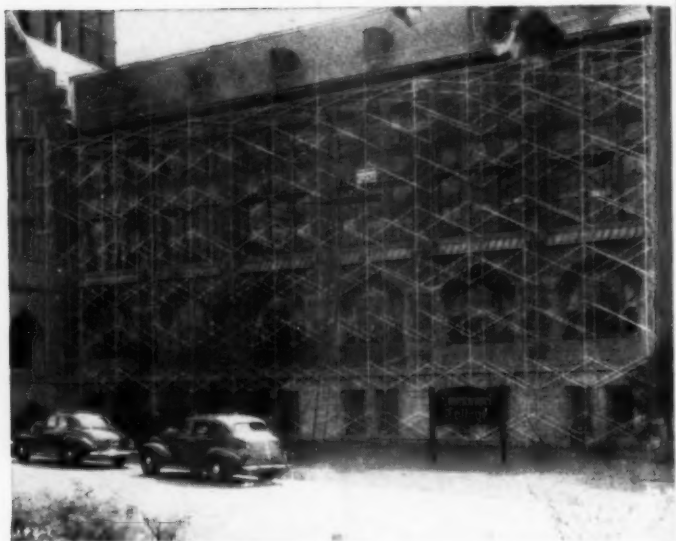
AND GET GREATER SAFETY

GOLD MEDAL
SCAFFOLDING

"TROUBLE-SAVER" Sectional Steel Scaffolds

● Easy to erect, "Trouble-Savers" provide top safety, speed of handling and labor economy. Welded for extra strength, these units handle heavier loads. *All parts are interchangeable.* "Trouble-Savers" are readily assembled **WITHOUT TOOLS.** Write for complete information.

COMPLETE STOCKS for sale or lease



Trouble-Saver installation at Emanuel College, The Fenway, Boston, Mass. Indoors or out, Trouble-Savers combine greater safety with maximum time and labor saving.

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Manufacturers of:

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behind the partitions and side walls...

Hot Rolled FURRING STEEL

• Complete Furring Requirements In A Wide Variety of Sizes (Angles, Channels, Bands) Made From High Grade Forging Quality Steel!

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STEEL
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MILTON, PENNA.

SAVE TIME AND LABOR GETTING WORK DONE USE "CONTRACTORS SPECIAL HOIST"

Here's a hoist that needs no expensive rigging... easy to take to and from jobs... sets up anywhere, between buildings, front or back yard or anywhere that's easiest. Handles like a bag or barrel truck... easy on gas... engine is air cooled, won't freeze in winter or overheat in summer. Simple to understand. Anyone can operate it. Hoists smoothly, no jerking. Just the thing to get material up to where it's needed.



6 Models
2 to 7½ Horsepower



Need No Introduction
"Contractor's Special" Hoists have been used by roofing and building contractors for years and are prized by every owner. They are ruggedly built to withstand years of usage, and pay for themselves in no time. Write for circular and price list.

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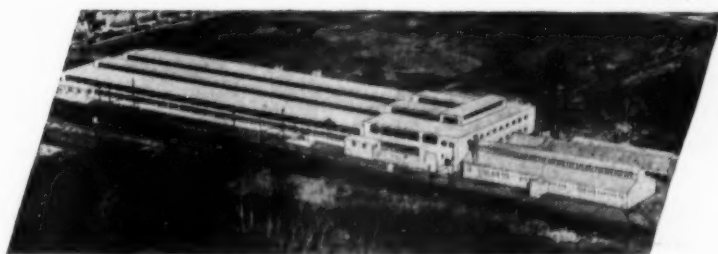
Chicago 22, Ill.



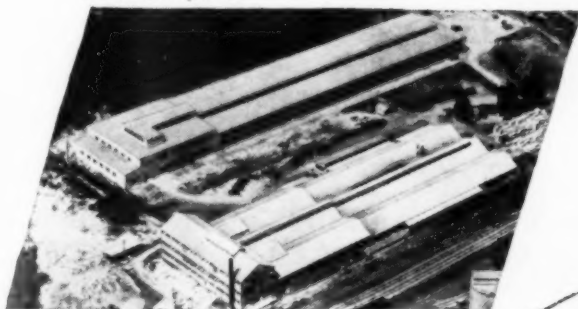
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*Serving the
growing needs for
Asbestos...*

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K&M's STRATEGICALLY LOCATED FACTORIES

K&M—a pioneer in the production of Asbestos and Magnesia products, operates 8 strategically located factories to handle the expanding requirements of its seven major sales divisions.

Our Research Laboratories are constantly in search of new and better ways to save and serve through improved and more efficient products.

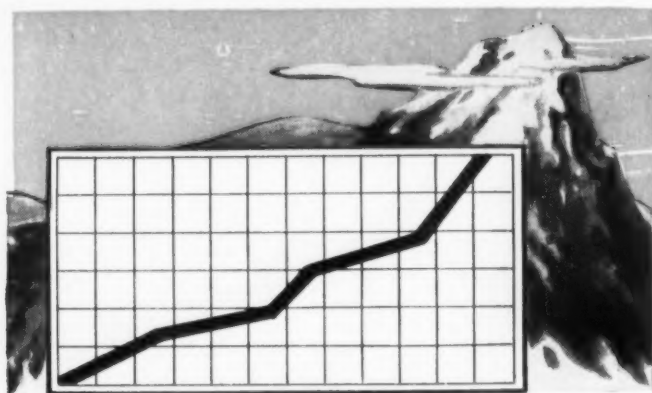
An experienced sales engineering staff is always available to give helpful advice on the correct application of these products.

*Nature made
Asbestos...*

*Keasbey & Mattison
has made it serve
mankind since 1873*

KEASBEY & MATTISON
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Point for Peak Sales with Lo-K INSULATION

Lo-"K" flameproofed Cotton Insulation gives you every advantage you could possibly have for doing a record insulation business in the current and oncoming building and repairing boom. Note these special features that few, if any other insulations can give to an equal degree.

1. Lightest weight type of insulation on the market. Requires only one third the normal trucking and warehouse space. Installs at a saving in time and labor up to 40 per cent. Easier and more economical to stock, handle and install. Does not sag or settle.
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7. Nationally advertised. Profitably priced. Liberal terms. Backed by Lockport's 78 year old reputation.

Lo-"K" flameproofed Cotton can automatically make you the top insulation dealer in your town. Write for full details.

LOCKPORT COTTON BATTING CO.

Dept. AB-6

LOCKPORT, NEW YORK

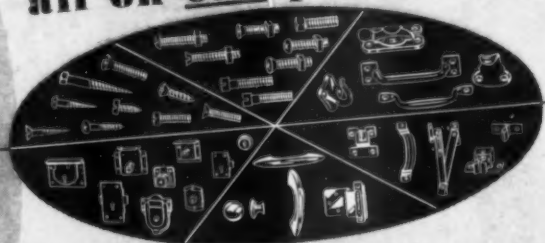
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Lo-K

INSULATION

served to you...
all on one platter



a COMPLETE LINE of PROFITABLE HARDWARE
made by NATIONAL LOCK...sold by YOUR JOBBER

Here is a widely diversified group of products, representing the answer to virtually every hardware requirement. This complete line includes cabinet hardware... cabinet locks... screws and bolts... storm sash hardware... and many other items. All are individually-packaged for ease of handling and quick identification. Look to the NATIONAL LOCK emblem as your buying guide... your assurance of superior quality. Order from your jobber.

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Up-to-Date Facts on The Complete Line of

Majestic
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to help you
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demands for
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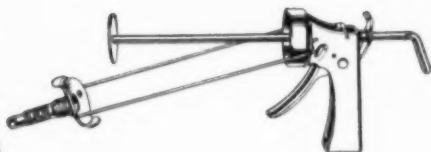


The **Majestic** Company, 834 Erie Street, Huntington, Ind.

Majestic — Nationally Known and Advertised for Over 40 Years

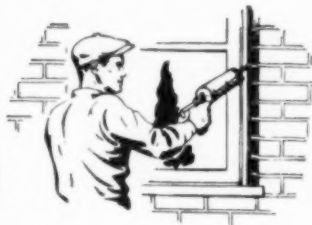
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IMMEDIATE DELIVERY!



STREAMLINED *New* CG-4 SPEED LOADER

Here's the calking gun you've been wanting—a gun that is priced so low it paves the way to calking sales you've never been able to touch before. It's light, sturdy, fool-proof. This gun will sell itself.



SPEED LOAD

Streamlined for quick, clean, efficient application

Nu-CALK

"THE WORLD'S FINEST CALKING"

What a selling combination this is! The world's standard of calking quality *plus* the most efficient and practical calking load on the market. Adheres to almost any surface. Standard color is "off-white." Order now. IMMEDIATE DELIVERY guaranteed!

Nu-CALK Calking Compound is furnished in 1/2 pint, pint, quart, gallon, 5-gallon cans. Also 55-gallon drums.

SPEED LOADS packed 10 loads to a carton, 4 cartons to a case. Full freight allowed on 8 cartons or more.



MACKLANBURG-DUNCAN CO.

OKLAHOMA CITY 1, OKLAHOMA

SOLD ONLY THROUGH HARDWARE STORES, BUILDING SUPPLY DEALERS AND LUMBER YARDS



Sell **Nu-Glaze** instead of putty!



Nu-Glaze sells fast and repeats. It's the perfect material for glazing wood or steel sash, replacing putty, setting plumbing, filling cracks, boatwork of all kinds, and general patching purposes. Sets to a rubber-like consistency. Clean to handle . requires no working up. Cheapest material to use in the long run because it "stays put."

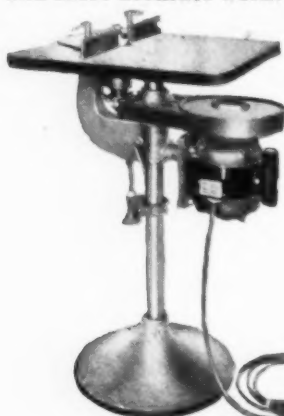
Furnished in 1/2 pint, pint, quart, 5 lb. and 12 1/2 lb. cans. Also in 25, 50, 100 and 880 lb. drums.

Do Precision Sawing...

- ON THE JOB
- IN THE SHOP

with H & A WOODWORKING TOOLS

H & A Woodworking Tools are designed to give builders, woodworkers and craftsmen all of the features needed for efficient, economical use all around the shop . . . or on the job. Their up-to-date design and high quality workmanship make each tool a long term investment that pays off in lower operating costs, longer service, and more accurate work.



Write AT ONCE for further information.

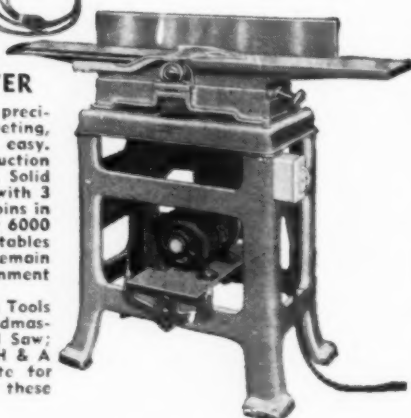
NEW! H & A No. 700 SHAPER

This high speed shaper—newly designed for all-around shop use—has the stamina and excellent construction for which H & A Tools are noted . . . an extra large, reinforced table, life-sealed ball bearings, and solid cast iron base. It will cut against the grain as easily as with and makes difficult cuts quickly and accurately. Model can be changed from Bench type to Table type by simply changing column.

H & A 6" JOINTER

Finest available—makes precision planing, edging, rabbeting, relieving, and chamfering easy. Sturdy, cast iron construction for vibrationless operation. Solid steel cutter head—fitted with 3 high speed steel knives—spins in life-sealed ball bearings at 6000 r.p.m. Extra long 42"x60" tables are stress released to remain level and in perfect alignment with cutter head.

Other H & A Woodworking Tools include: the H & A Woodmaster; the H & A 14" Band Saw; and the complete line of H & A Swing Cut-Off Saws. Write for full information on all of these tools.



Heston & Anderson

Founded in 1921



608 W. Kirkwood St., Fairfield, Iowa

MODERNFOLD COSTS NO MORE...

AND LOOK AT THE BEAUTY - - the Many Advantages!

In computing the cost of a conventional swinging door, you must figure on the cost of trim, jamb, the actual door, hardware, painting, etc. The price of Modernfold can be even lower—and the accordion-like action of this sturdy, durable door offers so many more advantages! It saves space and eliminates the area required for the swing of conventional doors. Modernfold is beautiful, too—colorful fabrics, attached to the metal frame, assure harmony with any general color scheme. Write for full details.



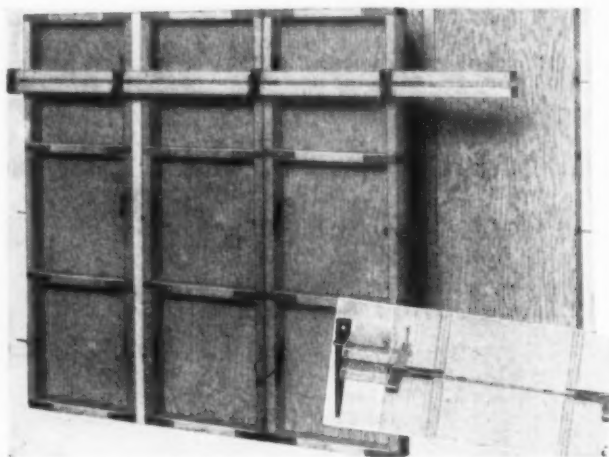
*A 2'4" wide x 6'8 1/2" high door costs only \$26.00 (F. O. B., New Castle). Either Beige or Ivory. Other Modernfolds correspondingly low priced.

modernfold
DOORS

NEW CASTLE PRODUCTS

New Castle Indiana
Consult your telephone directory for the names of our installing distributors.

EASY DOES IT with Symons Forms



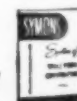
SYMONS Forming System is the easy way to form your concrete walls or slabs: That's why it's also the fast and cheap way. Even unskilled workers do a professional job with Symons forms. Easily adapted to the most irregular plans. No nailing and only one waler per wall. Sturdy, light-weight. Usable 50 to 100 times. This new system saves: 50% in materials—75% in labor.

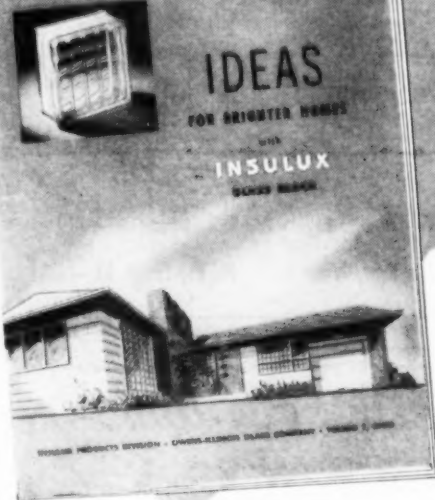
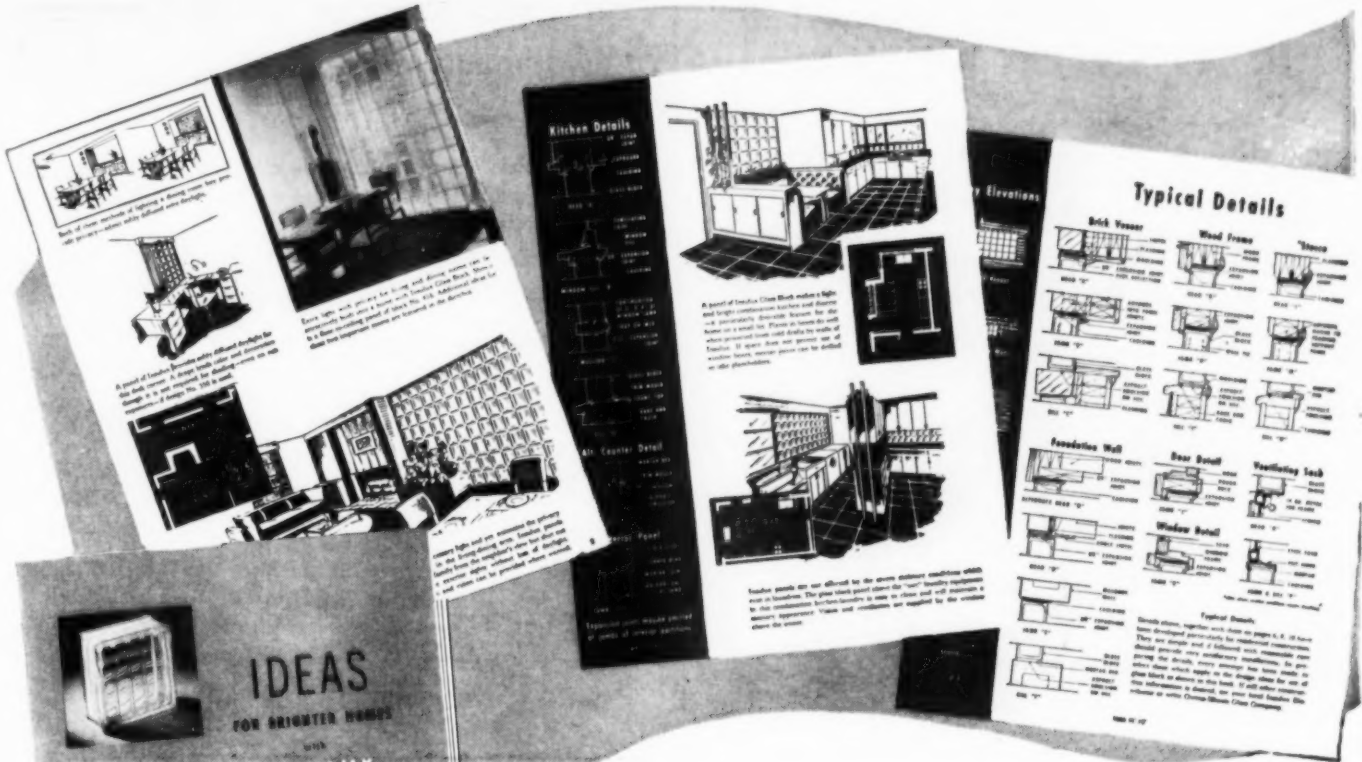
Rented with purchase option. Write for estimate and form layout.

Write today for our big free booklet which completely describes and illustrates the Symons forming system.

SYMONS CLAMP & MFG. CO.

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Why builders profit with Insulux

THERE'S a possible application for Insulux Glass Block in almost every room of an average house today.

The illustrated booklet displayed above is a handbook of these applications for Insulux. It shows many different ways you can profit with this remarkable product. Packed with suggestions, it will help you sell prospects on the idea of building with Insulux Glass Block.

Insulux Glass Block transmits light, insulates and reduces transmission of noise. It is strong and durable, and requires a minimum of maintenance. Easily cleaned with plain water, Insulux panels are free from rot, rust and corrosion.

Send today for your free copy of "Ideas for Brighter Homes," complete with technical data and installation details for Insulux Glass Block. Clip coupon and mail.

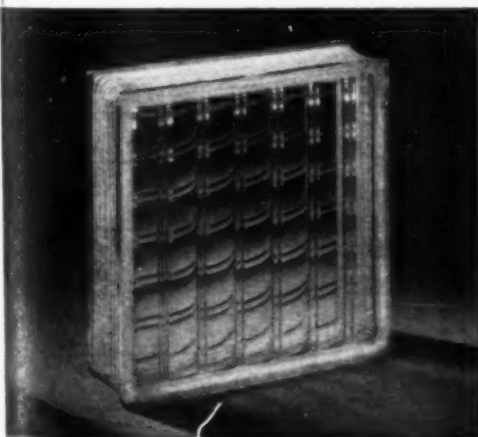
GREATLY EXPANDED PRODUCTION FACILITIES MEAN INSULUX IS NOW AVAILABLE FOR IMMEDIATE DELIVERY IN LARGE OR SMALL LOTS

INSULUX GLASS BLOCK

AMERICAN STRUCTURAL PRODUCTS COMPANY

Subsidiary of

OWENS-ILLINOIS GLASS COMPANY



American Structural Products Company
Dept. E-54, P.O. Box 1035
Toledo 1, Ohio

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I am interested in the bigger profits I can make by building with Insulux Glass Block. Please send me your illustrated booklet on home applications, "Ideas for Brighter Homes."

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Address _____

Firm _____

City _____ Zone _____ State _____

AIR AT SHORT NOTICE...

A light-weight, handy compressor that can get around fast! Powers light hand-held Rock Drill, Paving Breaker or equivalent air tools through its easy-breathing Feather* Valves — with unfailing dependability and economy.

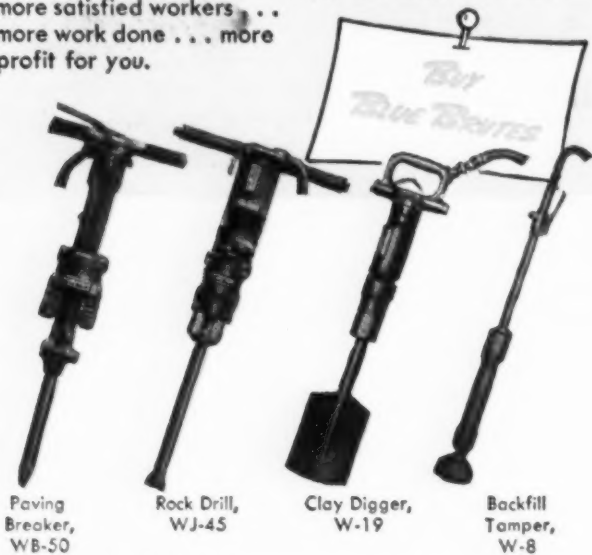
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60' Contractor's Portable Compressor. Other Blue Brute Compressors up to 500' capacity.

FOUR FAST WORKERS...

Though tough and powerful, Blue Brute Air Tools are light and compact, with the easy handling that means more satisfied workers... more work done... more profit for you.



Your nearby Worthington-Ransome Distributor (write us for his name) has the complete line of Compressors, Rock Drills and Air Tools, Contractor's Pumps, Portable Mixers, Truck Mixers and Pavers.

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WORTHINGTON



WORTHINGTON PUMP AND MACHINERY CORPORATION

Worthington-Ransome Construction Equipment Division
265 Canal Street, Holyoke, Massachusetts

IF IT'S A CONSTRUCTION JOB, IT'S A BLUE BRUTE JOB Fig-16

Are Insulation Values Permanent?

READ A TYPICAL QUOTATION:

"Many loose insulations settle down from year to year, producing areas that are eventually without insulation."

"Insulation," by DALZELL AND MCKINNEY
published by American Technical Society.

Thermal Factors Stamped on Every Infra Carton, Infra C Factors and Rockwool Equivalents

C.052 Heat Flow Down, equals 6" Rockwool.

C.083 Heat Flow Up, equals 3.97" Rockwool.

C.10 Lateral Heat, equals 3-1/3" Rockwool.

Infra is Permanent in Insulation Values

☆ Has lowest conduction—1 part mass to 431 of low-conductive air. ☆

WRITE FOR FREE 16-Page BOOKLET
"Simplified Physics of Thermal Insulation"

INFRA INSULATION, INC.

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"The Ole Reliable"
MARKWELL
"RB3" SCREEN TACKER
AND RB 5/16" SCREEN STAPLES
Immediate Delivery!



OTHER MARKWELL PRODUCTS NOW AVAILABLE
(CATALOG ON REQUEST)

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MARKWELL MFG. CO., INC.

INDUSTRIAL PRODUCTS DIVISION

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STOP that Drip

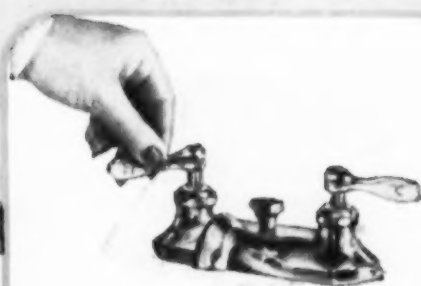
with Salter Feather-Touch Fixtures and Faucets



Salter Feather-Touch fixtures **ELIMINATE DRIPPING NOT FOR MONTHS BUT FOR YEARS**... tests reveal they operate like new even after an equivalent of over 20 years' service. This drip-proof service plus their feather-soft closing, without friction pressure, is most welcome to folks who are practically "drip dippy". Plumbers, who are constantly annoyed by trivial service calls, also proclaim their no drip operation. Eliminate your service problems and make more satisfied customers by specifying and installing Salter Feather-Touch fixtures and faucets. Their original cost is only slightly more than other top quality fixtures. For a catalog and information about sales stimulating enclosures, see your wholesaler or write direct to ...

H.B. Salter MFG. CO., Marysville, Ohio
And Division **THE GLAUBER BRASS MFG. CO.**, Kinsman, Ohio

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Positive **DRIP-PROOF** shut off with Feather soft operation

Simple **"EZE"** CHANGE precision construction

Washers, seats and conventional packing entirely **ELIMINATED**

DRIP-PROOF operation even after many years of service

ADVERTISED in the leading Home Magazines



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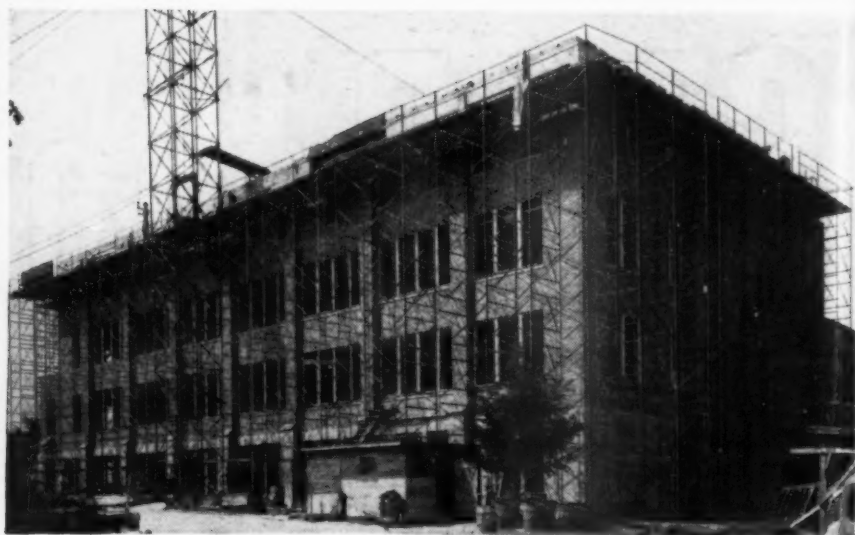
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SCAFFOLDING

Fits the Job!

Adaptable Safway Scaffolding is quickly erected to fit the contours of all your construction jobs, large and small. The tubular steel Safway structure illustrated easily fits between building pilasters and over sloping ground to facilitate work at every point.

Only a few types of standard interchangeable parts are needed for scaffolding of any required size and shape. Unskilled help can quickly assemble Safway equipment without special tools, using the



simple coupling pins and studs provided. Dismantling is equally easy, and the parts are stored compactly. They may then be re-used in the same or any other form desired.

Safway Scaffolds are strong, rigid and safe—carry the approval of Underwriters' Laboratories, Inc. With reasonable care, this equipment will last indefinitely.

FREE CATALOG

Big 32-page catalog with application photos suggests how to use Safway profitably on inside and outside work. Ask for Bulletin AB-648.



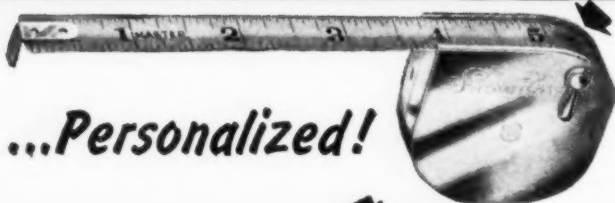
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SAFWAY STEEL PRODUCTS, INC.
MANUFACTURERS OF TUBULAR STEEL SCAFFOLDING AND EQUIPMENT

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...Personalized!

Compare these features with any others.

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I enclose \$2.00 for the 6 ft. Streamline
\$2.50 for the 8 ft. Streamline

Engrave my name (75c extra). Please print clearly.

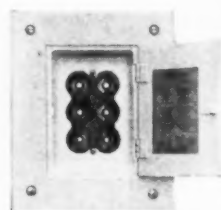
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EVERY HOME NEEDS
ONE OF THESE...

Take Your Choice



Ⓐ Type R Enclosed Cut-outs are popular safety type fuse boxes. As few as 2 or as many as 20 circuits can be furnished.



Ⓐ Circuit Breaker Load Centers are the modern method of circuit protection for ranges, light and appliances. Automatic "trip-off" when short circuits occur; service restored by a simple flip of the handle. Nothing to replace; no danger of shock.

THESE TWO Ⓐ ELECTRICAL CIRCUIT PROTECTIVE devices provide the electrical capacity and safety features needed for household electrical circuits.

All units carry the Underwriter's seal of approval and in general exceed material, workmanship and design standards by a wide margin.

To make certain you select the right unit for your home, write for our Service Equipment Bulletins.

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Johns-Manville **SUPER-FELT**

... the superior Rock Wool Batt for insulating
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Easier to install

The J-M Super-Felt Batt is strong and tough. Its superior felted structure makes it easier to handle ... ensures savings in application. The batt holds its shape ... fits snugly between framing members.



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The Super-Felt Batt is resilient yet so rigid it will actually stand alone. When installed, it stays in place, won't settle.



It's fireproof, too!

You can't burn it even with a blow torch. J-M Super-Felt is rock wool, a mineral. It acts as a fire-retardant ... prevents spread of flames in wall spaces.

Send for Super-Felt brochure, HI-125A.
Johns-Manville, Box 290, New York 16, N. Y.



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PRODUCTS

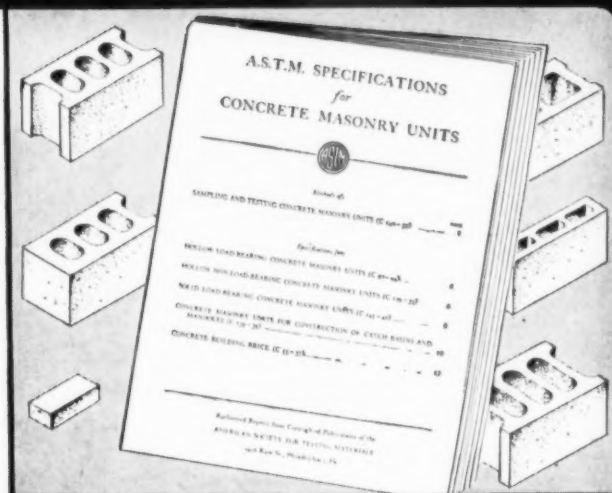
QUALITY CONCRETE MASONRY CONSTRUCTION

IT'S ALWAYS ESSENTIAL TO USE QUALITY BLOCK

QUALITY CONCRETE masonry construction begins with adequate footings. The second essential is using block that meet A.S.T.M. specifications for compressive strength, water absorption and moisture content. These specifications cover load-bearing and non-load-bearing units.

Using concrete masonry units that meet A.S.T.M. specifications, along with "top-flight" workmanship and design will ensure walls that are sound, durable and weather-tight—a source of satisfaction to customer, contractor and block manufacturer alike.

Write today for a free copy of the complete A.S.T.M. specifications for concrete masonry units, which is distributed only in the United States and Canada.



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THE SECOND OF
6 IMPORTANT STEPS
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CONCRETE
MASONRY
CONSTRUCTION**



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A national organization to improve and extend the uses of portland cement and concrete...through scientific research and engineering field work

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Guarantees*



IN this Florida Apartment building, the architect used large windows to assure airy rooms, which he protected from the noon-day sun with wide eaves and an interesting awning over the first floor.

With HOPE'S STEEL CASEMENT WINDOWS he obtained the complete use of the window opening for ventilation.

Hope's Windows are easily screened and convenient to operate. Their durability for lifetime service is assured.

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Jacksonville, Fla.
D. Floyd Rosser, Architect*

HOPE'S WINDOWS, INC., Jamestown, N. Y.

THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS

We've come a long way since then . . .

Man! Was this progress back in the 1800's when Richmond opened shop. Imagine! A water pump right in your own kitchen. And if you had enough cash, you could ease the little woman's washday chores with one of these amazing "labor saving" wash boilers.



THE THURMAN:
42" x 25"



THE TRAXLOR:
42" x 25" AND 50" x 25"

In big demand for small homes

NOTE THESE RICHMOND FEATURES

Combinations come with right or left-hand tray. Roll rim for cabinet installation or modern apron type. 5" ledge back. Drilled for deck-type swinging spout supply fitting. Finished in whiter white* acid resisting enamel and made of durable cast-iron.

Cut cost, save space with the Richmond Sink & Tray

The days of the big kitchen are gone. Space means money today, and that means smaller kitchens. Here's your tip-off on the kind of equipment to recommend to your customers. They need space savers . . . money savers . . . they'll appreciate Richmond's whiter white* sink and tray. It is the ideal kitchen combination for apartments, summer cottages, small homes, etc.

And how these combinations gleam! The whiter white*

*Achieved by special Richmond enamel formula

Richmond finish assures a perfect match with under-sink cabinets. It's the white that stays white! So whenever space and money restrict installation of a separate laundry tray, specify the Richmond enameled cast-iron sink and tray.

Richmond sink and tray combinations are available now. Order from your wholesaler, or write for details to: RICHMOND RADIATOR CO., Dept. AB-6, 19 East 47th Street, New York 17, N. Y.



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AFFILIATE OF REYNOLDS METALS COMPANY



Enameled Cast Iron Ware • Vitreous China • Perma Gloss • Gas Boilers • Gas Winter Air Conditioners • Oil Winter Air Conditioners • Gas Gravity Furnaces • Radiators

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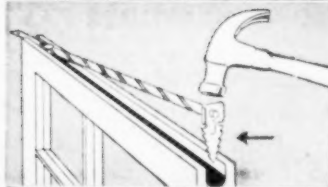
for Builders . . . Dealers . . . Architects

GRAND RAPIDS
Invisible
SASH BALANCE

Plus +



Plus +



= Equals =

1. PRODUCT LEADERSHIP

Laboratory tests prove that the "Grand Rapids Invisible" is the most practical and efficient sash balance for double hung windows of every type.

2. PUBLIC ACCEPTANCE

Advertised to 134,445,000 readership in Better Homes and Gardens, American Home, Farm Journal and Small Homes Guide, the "Grand Rapids Invisible" Sash Balance is first choice of home owners everywhere.

3. SIMPLIFIED INSTALLATION

Just drive in one fastener—screw in one screw. Simple to adjust without removing sash. Saves hours of costly installation.

**LARGER VOLUME
BIGGER PROFITS**

Preferred because they are actually invisible, the "Grand Rapids Invisible" Sash Balances are dependable and easy to operate under all climatic conditions. You'll find them easier to sell—easier to make a profit on.

AT YOUR SERVICE NEVER IN YOUR SIGHT

No tapes . . . no cables . . . no exposed tubes . . . nothing to catch dust or paint . . . nothing to explain away.

GRAND RAPIDS SASH PULLEYS

No. 103 face plate, cone bearing type, and Nos. 175, 109, 110 sawtooth drive type sash pulleys cover 95% of all sash pulley requirements.



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CATALOG IN
SWEET'S

WRITE
for Illustrated
Specifications
and Instructions

GRAND RAPIDS HARDWARE COMPANY
GRAND RAPIDS 2, MICHIGAN

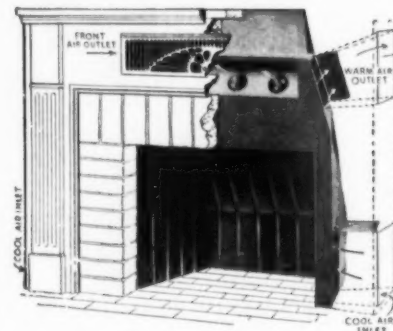
Quality Leaders in Sash Hardware for over 50 Years

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The Superior Heat
Circulating Fireplace

THE MOST EFFICIENT AND DURABLE

PRODUCES MORE HEAT because the air contacts the heating surface of the firebox and the upper throat. Super-heating round air passages connect both upper and lower heating chambers. This extra heating surface through and around the throat is the most valuable of all because it is directly above the fire.



Front view of HEATFORM installed, with part of masonry cutaway.

Two factories to give you quick service. Distributors and Dealers write
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EAST OF MISSISSIPPI RIVER • WEST OF MISSISSIPPI RIVER
601-N North Point Road • 1708-C East 15th St.
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GIVES MORE YEARS OF SERVICE

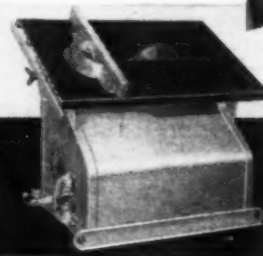
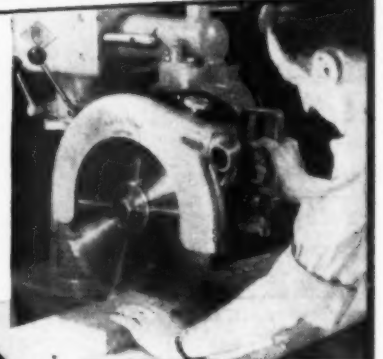
because of the die-pressed ribbed construction of the firebox. Large air inlet and outlet capacity allows for greater flow of air over the hot metal, thus preventing deteriorating temperatures. Masonry downdraft shelf: no exposed metal parts beneath the chimney to rust out.



Radial and Tilt-Table

SAWS

"RADIAL ARM"—for fast, accurate, cross cutting, mitering, ripping, bevel cutting, dados, shaping, routing, etc. Furnished with steel leg table or Gas-Electric trailer combination on pneumatics.



"TILTING TABLE"—tested and proved on thousands of jobs. Three sizes for 10", 14", 16", and 18" blades. Powered with electric motor or gasoline engine.

Sold and serviced by leading construction equipment dealers everywhere.

CONSTRUCTION MACHINERY CO.'S
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Also makers of Concrete, plaster and mortar mixers, Hoists, Pumps, Dump-Over Carts, Bin Batchers, Jetcrete Guns, etc.

Model "dream houses" similar to the one in the RKO Radio Picture "Mr. Blandings Builds His Dream House," starring Cary Grant and Myrna Loy (a Selznick Release), will be seen by home owners all over the country.

*Mr. Blandings
builds his
Dream House*



*...builds
prospect
acceptance*

for YOU!



THROUGHOUT THE COUNTRY, model "dream houses" are being built to the pattern set in the current movie hit, "Mr. Blandings Builds His Dream House," and many of them are equipped with G-E heating units.

Each section of the country can have the type of heating it prefers . . . because General Electric has four kinds to offer . . . gas and oil boilers . . . gas and oil warm air furnaces.

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That's one more reason why it will pay you in owner satisfaction to specify G. E. for home heating. Call your General Electric distributor for full information. *General Electric Company, Air Conditioning Department, Section H8156, Bloomfield, N. J.*

GENERAL ELECTRIC

Automatic Gas and Oil Heat



G-E Oil-fired
Boiler



G-E Oil-fired
Warm Air Furnace



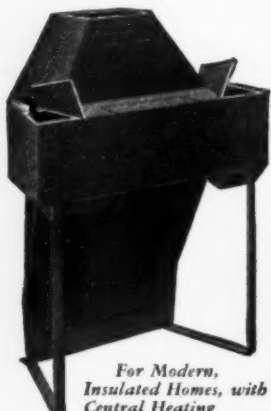
G-E Gas-fired
Boiler



G-E Gas-fired
Warm Air Furnace

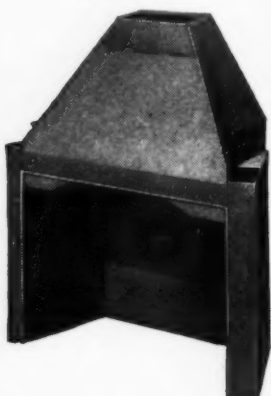
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More sales—better profits for you—with the Bennett Line—Fireplace Units, Dampers (Steel and Cast-iron), Clean-outs, Ash Dumps, Lintel Bars, etc. . . . to fit every prospect's requirement. Only Bennett builds two types of Fireplace Units, to meet all building needs.



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For Camps, Cottages,
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Fresh-Aire
FIREPLACE UNIT

BENNETT
Warm-Aire
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Fresh air, from outdoors, is heated and circulated thruout the room. No loss of expensive furnace heat up the chimney . . . no cold, unhealthy floor drafts—and no smoke!

The unit cannot interfere with the traditional beauty of the fireplace—it's hidden within the masonry . . . Easier and quicker to build. Mantel may be designed with complete freedom.

Draws cool air from floor level, heats and recirculates it . . . throughout the whole room! Keeps air fresher. Furnishes a complete form for the mason—saves your customers' construction and operation costs. . . No smoke. Adaptable to any mantel design.

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WANTS . . .



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Chartered in 1906
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with coated optics

Rugged — accurate — highly dependable, the Universal Level-Transit offers builders an all-purpose instrument of unexcelled practicality and versatility. Quickly converted from a precision level to a highly accurate transit in two easy motions.

Patented ball-bearing race assures perfect adjustment under severest conditions. Telescope 12" long, 25 power, horizontal circle 4½" with Verniers to 5 minutes. Write today for full information — also free booklet, "How To Lay Out Building Lots." We repair all makes of instruments

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Manufacturers of instruments
for engineers, surveyors and builders.

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Move it Fast - Move it Easily

You can really go places with a 6-S TRAIL-SMITH. It's faster to the job and faster on the job. Always dependable. Compact design, low center of gravity and auto-type leaf springs combine to assure smooth towing at even highest speeds. Stabilizer legs give sturdy support during operating cycle, plus extra safety when moving. Try this handy one bag mixer on your next job. Write for Bulletin No. 235.



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Famous for Performance on the World's Greatest Projects

A photograph of the Jacob Riis Housing Project now being built to rid New York City of one of its worst slum areas. Contractors doing the work are: Willcox Construction Company, Inc., Morse L. Bein, Inc., Fish Construction Company.



15 million dollar
project proves
advantages of...

Kimpreg*+ Plywood Concrete Forms

KIMPREG* plastic surfacing is a tough, durable material fused to exterior grade plywood in manufacture. Carloads of KIMPREG+Plywood panels were supplied for the tremendous Jacob Riis construction job and here's why:

Lower Ultimate Cost. KIMPREG increases the strength—adds to the life of plywood. KIMPREG-surfaced plywood concrete forms—handled with reasonable care—can be re-used scores of times.

Smooth Concrete Finish. Plywood panels protected with KIMPREG produce a remarkably smooth, long-lasting surface. They were ideal for the giant Jacob Riis Project because ceilings were not plastered, but painted directly over the concrete. The exceptional smoothness of the slab kept rubbing and stoning labor at a minimum.

Far Less Maintenance Expense. Light in weight, KIMPREG+Plywood panels cut handling time. Highly resistant to water, they won't swell—require no separation while drying. And oiling is reduced to a minimum. They strip easily—clean quickly.

Full Information For You. Time-saving, money-saving KIMPREG-surfaced plywood concrete forms are available through your local plywood jobber. They are also sold by individual plywood manufacturers under the trade names Laminex, Inderon and Westboard Industrial Plastic. For complete details write:

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Plastics Division • Neenah, Wis.

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PLASTIC SURFACING



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INSL-COTTON
INSULATION
gives
UNIFORM
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over every inch
it insulates-



There are no high or low spots when the insulation is Certified Insul-Cotton. To avoid human error, Insul-Cotton is laminated about 25 layers per inch thickness, making it always uniformly effective.

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Actual tests in leading laboratories and by the U. S. Dept. of Agriculture prove Insul-Cotton to be from 4% to 36% more efficient than any other available type of insulation—"k" factor 0.24. It is permanently flame-proof—moisture and insect repellent—an excellent sound deadener. It exceeds government specifications for 7d, FHA, FPHA and HH-1-528 requirements.

All Cotton Insulation Is Not Insul-Cotton—Specify by Name

INSL-COTTON DIVISION

TAYLOR BEDDING MFG. COMPANY

Taylor, Texas • Belton, Texas

*The Originators of Flame-Proof, Fire-Retarding
 Cotton Insulation*

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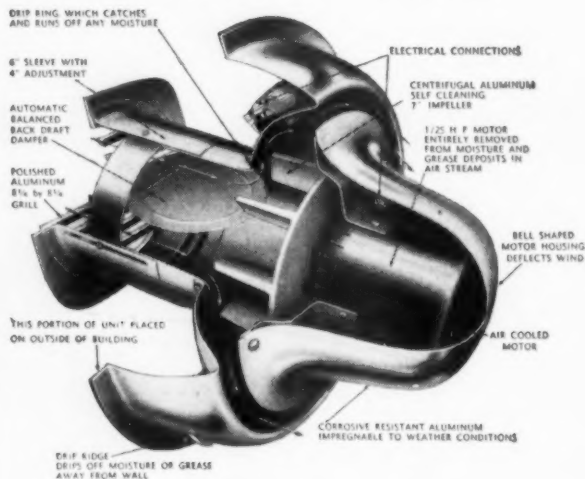
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CRYSTAL GAZING is eliminated when you buy a pump with an A.G.C. Rating Plate. There is no guesswork about the pump's actual capacity—the work it will do. What is more, new and higher standards for pumping performance have now been set by the Contractor's Pump Bureau. For example, pumps formerly warranted to deliver 20, 65, 105 and 325 G.P.M. at static lifts of 10 ft. and heads of 70 ft. are now rated to deliver 85, 110, 160, and 415 G.P.M. at

the same lift and head. The Member Manufacturing Companies listed below are meeting these new Higher Head Standards as attested by the A.G.C. rating plate they place on their pumps.

Look for this A.G.C. Rating Plate on the next pump you buy. It takes the guesswork from pump selection. It assures greater output at higher heads—and much, much more for your money.



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Forty pages packed full of useful information for the pump user. Answers all questions as to pump selection for the job—what size pump to use—the do's and don'ts of pump operation—standards for measuring heads and capacities—and other technical data. Contact your dealer or write any of the companies listed below for your copy.

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Made of FIBERGLAS*



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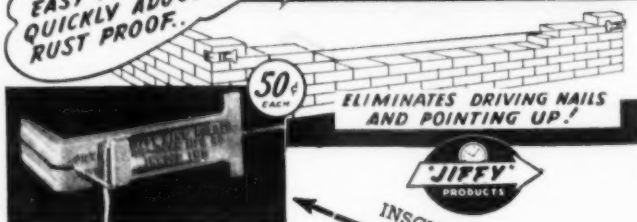
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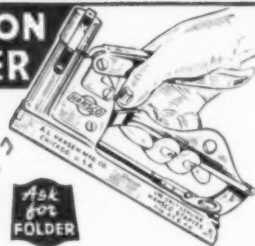
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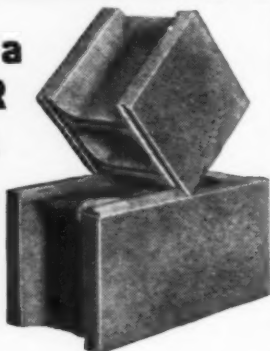
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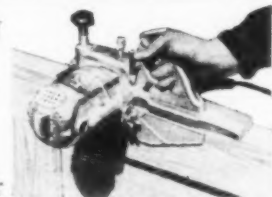
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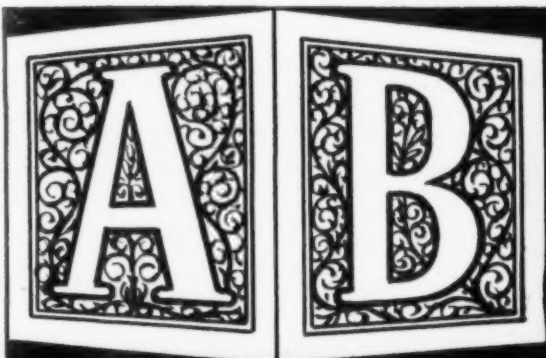
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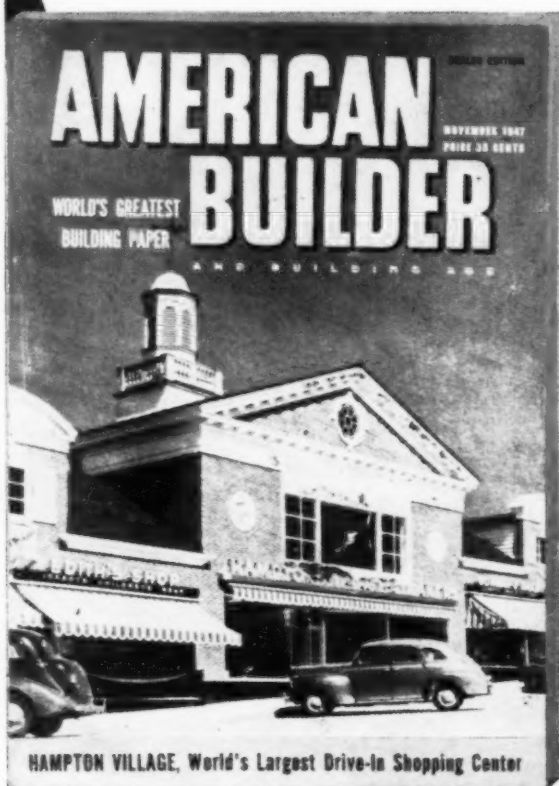
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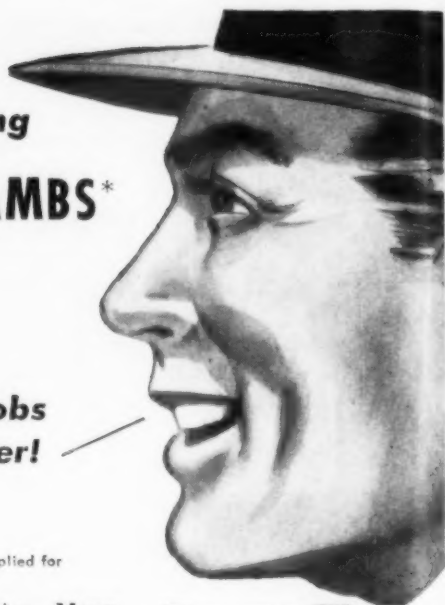


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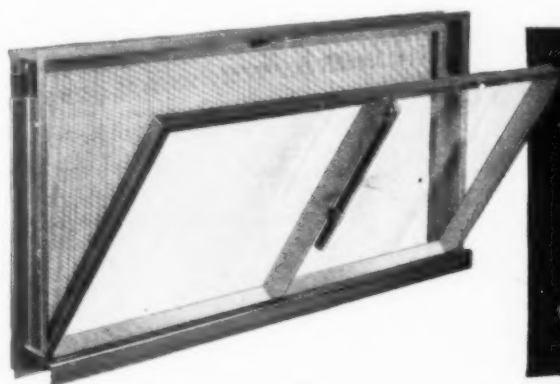
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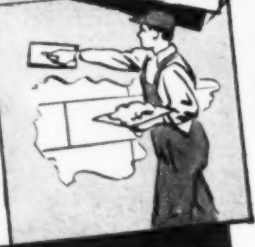
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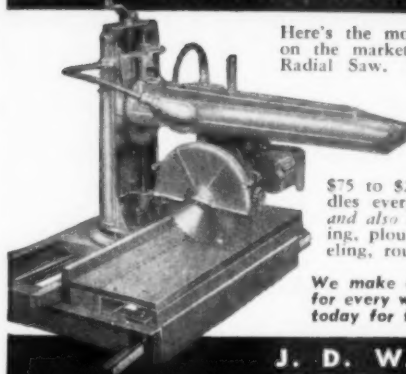
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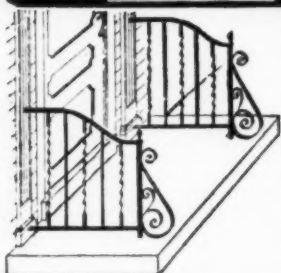
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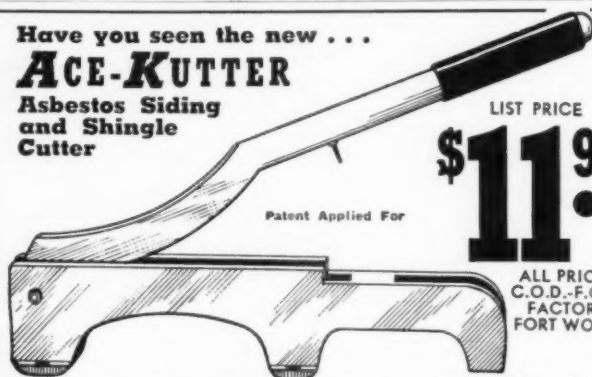
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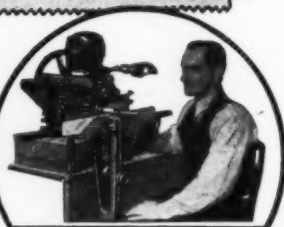
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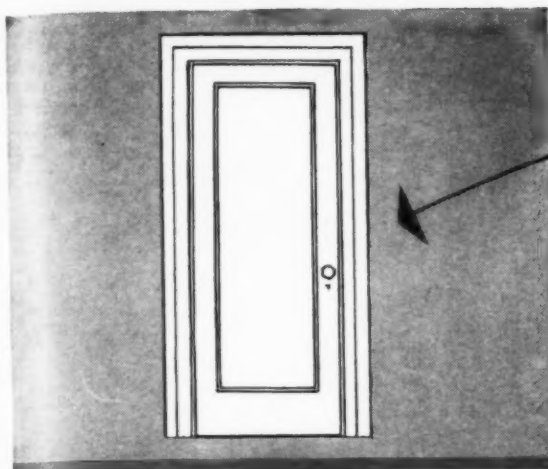
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